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TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE

HYGIENIC LABORATORY.—BULLETIN No. 93

APRIL, 1914

Biological
& Medical
Serials

DIGEST OF COMMENTS
ON THE
PHARMACOPŒIA OF THE UNITED STATES
OF AMERICA
[EIGHTH DECENNIAL REVISION]
AND ON THE
NATIONAL FORMULARY
[THIRD EDITION]

FOR THE CALENDAR YEAR ENDING DECEMBER 31

1912

BY

MURRAY GALT MOTTER

AND

MARTIN I. WILBERT



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1914

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UNITED STATES PUBLIC DEBT SERVICE

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1944

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OF AMERICA

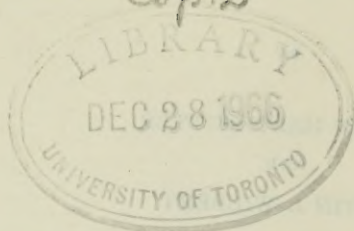
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PREFACE.

The completion of this, the eighth bulletin of the present series, rounds out three decades of the systematic compilation of comments and criticisms on the Pharmacopœia of the United States as instituted by the late Charles Rice, who, as chairman of the Committee of Revision of the Pharmacopœia of the United States, began compiling notes and abstracts in 1883. Even at that time he clearly foresaw the need of compilations of the criticisms on the Pharmacopœia and the substances related to it if the work of the committee of revision were to reflect accurately the practices of the time and the requirements of medical practitioners.

The enlarged and more comprehensive digests of comments compiled since the enactment of the food and drugs law and the accompanying recognition of the Pharmacopœia and the National Formulary as standards for the articles contained therein have met with general approval, not alone by pharmacists, pharmaceutical chemists, pharmacologists, and workers in related branches in this country, but also by a large number of scientific workers interested more or less directly in the development of foreign pharmacopœias.

The material included in the present bulletin has been arranged with a view to a still further economy of space and to this end every word that might in any way be considered superfluous or unnecessary has been omitted. It should be borne in mind that the compilers are in no way responsible for the opinions expressed and while a consistent effort has been made to present the material in an impartial way so as accurately to reflect the trend of current comment, they fully appreciate that it is quite impossible to reflect in a few lines the intent or the content of a comprehensive paper on any given subject. This bulletin, perhaps, even more than the numbers that have preceded it is at best but an elaborated index of current literature relating to pharmacopœial articles. In order to learn accurately a given writer's ideas or the content of his paper the original communication should be consulted whenever practicable.

In connection with some few of the frequently discussed substances it has been thought unnecessary even to enumerate all of the many available references and in connection with such articles or headings only the general trend of the literature is indicated with additional references to other compilations to give, collectively, a more complete survey of the available literature. In the practical utilization of these bulletins it should be borne in mind that the nature or the comprehensiveness of any given communication is to

some extent reflected by the page reference and that this, more fully perhaps than the title alone, will frequently give an indication of the length or value of any given communication.

The available literature of 1912, relating to pharmacy, chemistry, pharmacology, and therapeutics has been carefully reviewed, and all references in any way bearing on the articles included in the Pharmacopœia of the United States or the National Formulary have been compiled and with the limitations above indicated have, so far as practicable, been included in the present bulletin.

In addition to the curtailing of the individual abstracts to a bare statement of fact some of the material, particularly the introductory portion of the bulletin entitled "General Comments," has been rearranged and now includes a reflection of the trend of the literature relating to "Serums and Vaccines," formerly included in alphabetical sequence with the comments on official articles. The rearrangement of this material was thought to be advisable in order to facilitate reference by including the several headings in the table of contents, and because it also permits a more satisfactory arrangement of the comments on biologic products generally.

Among the more important indications of progress in matters relating to the use of drugs and medicines it may be well to call attention to the symposium on a limited materia medica presented at one of the sessions of the Section on Pharmacology and Therapeutics of the American Medical Association at the meeting in Atlantic City in June, 1912. The opinions expressed appear to be uniformly in favor of restricting decidedly the number of articles to be discussed in medical schools, and of improving the nature of the instruction given thereon. It was pointed out, for instance, that the effect on the student who studies or attempts to study all that is known of official drugs is that, after graduation, he finds many of the articles to be of doubtful value and immediately begins to turn to the newer drugs and to accept at their face value the statement of the manufacturer. It is believed by competent authorities that it would be a great advantage to those who are teaching pharmacology and therapeutics if the Pharmacopœia could be limited to really useful drugs. It is also admitted that at the present time there is such a wide difference of opinion in regard to the desirable scope of the Pharmacopœia that it is practically impossible even to expect to do much in this direction. There can be no doubt, however, that the list of "Useful Drugs," compiled and promulgated by the Council on Pharmacy and Chemistry of the American Medical Association will go far toward establishing an acceptable restricted list of drugs and their preparations. The interest that has been evidenced by medical practitioners generally, and by teachers of therapeutics particularly, will serve to insure ultimate success.

International uniformity in the standards, requirements, and tests for widely used or potent medicaments has again been prominently discussed at various times and at different places. Not the least important of these discussions have been the reports presented to Section VIIIb of the Eighth International Congress of Applied Chemistry, which met in New York during the month of September, 1912. At the request of this section the International Congress in general meeting favored the continuation of the work to provide for international standards of strength, purity, methods of testing, and nomenclature of pharmacopœial preparations, and established an international committee to consider further the practicability of developing international uniformity. Among other factors of considerable importance from an international point of view was the organization of an international federation of pharmaceutical associations at The Hague and the proposition to hold there an international congress on pharmacy in 1913.

The only publication of a pharmacopœial nature issued during 1912 was the supplement to the Ph. Belg. III, which was reprinted complete in the several pharmaceutical journals of Belgium. This supplement includes a total of 28 titles, mostly of the type designated as new remedies.

The German Pharmacopœia, published in 1910, continues to be actively discussed, not only in the pharmaceutical journals of Germany, but in the journals of other countries as well. In this connection a number of valuable as well as timely suggestions have been brought forward which should be of interest to the pharmacopœia makers of all countries.

The British Pharmacopœia is now being prepared for the press, and the president of the General Medical Council, in a recent address, stated that the Pharmacopœia Committee had already prepared for the press the draft of four large sections of the text and that it was hoped that the first proofs of the book might be ready for submission to the committee in the very near future. The ninth revision of the Pharmacopœia of the United States, according to a report recently published, is almost ready for the press and should be available for distribution within a year at most.

Never before have the public health features of pharmacopœial work been so thoroughly or so widely appreciated as at the present time. While in many foreign countries the standardization and control of medicaments has long been an important function of government, the need for such control is only now slowly being appreciated in our own country. The reports of the several officials intrusted with the enforcement of laws relating to the production and sale of drugs have emphasized time and again that much of the material that is now being sold as medicine in this country is

either directly harmful or absolutely useless, and that from a public health point of view considerable progress is necessary before the Pharmacopœia and related books of reference can occupy the place they rightly deserve as important factors in the conservation of public health. In this connection, it has also been pointed out that there is a considerable portion of every drug stock in every drug store in every state of this country that is substandard; particularly is this true of fluid extracts and many other liquid preparations not prepared by the pharmacists themselves, for which there is a limited demand and which preparations, therefore, are kept on hand for indefinite periods of time, ranging from one to ten or more years.

The material contained in Public Health Bulletin No. 56, entitled "Digest of laws and regulations in force in the United States relating to the possession, use, sale, and manufacture of poisons and habit-forming drugs" amply reflects the now existing variations in the requirements of existing laws and clearly indicates the difficulties to be encountered in regulating or controlling the purity of medicines in the several States. This bulletin also demonstrates the general absence of adequate provision for supervising the sources of supply of medicines, though a satisfactory beginning has been made in the recognition of reliable standards. Thus it appears that, in addition to the Federal Government, there are no less than 48 political divisions in this country which recognize the Pharmacopœia of the United States as a standard for drugs and medicines, and 40 political divisions in this country which recognize the National Formulary as a supplementary standard. If, in addition to this general recognition of authoritative standards, adequate provision were made to enforce the existing requirements, a great improvement would no doubt result in the nature and kind of medicines supplied to the sick in all parts of the country. The need for some adequate supervision of this kind is fully reflected in the pages of the present bulletin in connection with a limited number of articles which have been examined by State commissioners or State boards of health and which usually show decided variation from established standards.

While the reported results of analyses may properly be thought to be appalling there are a number of factors that must be recognized and corrected before a satisfactory solution of the medicine supply business can be hoped for. The first and perhaps most important of these several factors is the proper placing of responsibility for the nature, kind, and purity of the medicines supplied. This requirement is being provided for, to some extent at least, by recently enacted laws to regulate the practice of pharmacy, by placing the responsibility squarely on the person dispensing the drug.

The general subject of changes produced in a drug because of deterioration has received altogether too little attention in the past.

It is not generally recognized that many formerly well-known drugs have probably been discredited because of their failure to accomplish the object for which they were administered, a failure perhaps largely due to some form of contamination, or to decomposition not recognized by the dispenser. In addition to the changes that may be produced by heat, by the constituents of the air, by ferments, or by microorganisms, some recent observations by Neuberg, of Berlin, call attention to the fact that nearly all types of organic compounds acquire a pronounced photosensitiveness when they are mixed with inorganic compounds. Iron salts, for instance, provoke such changes most strikingly, and it is quite possible that otherwise innocuous materials may be converted in part at least into decidedly harmful constituents. This line of investigation is, of course, quite new, but is sufficiently suggestive to point out the desirability of holding the final dispenser or vendor of medicines directly responsible for the preparation as sold.

With the bringing down to date of the material contained in this series of bulletins it has become increasingly difficult to secure ready access to the journals not on file in the library of the Hygienic Laboratory, and the publication of the several bulletins must necessarily be delayed far beyond the time that would suffice were all of the necessary literature directly available to the compilers. Some more satisfactory arrangement for securing access to foreign literature particularly may be secured in the future, and in this event the publication should be of even greater usefulness and value than at present.

The thanks of the compilers are due and are hereby extended to the publishers and editors of journals and periodicals furnished in exchange; to the secretaries of State and national pharmaceutical associations for copies of the annual proceedings; to John Uri Lloyd, Cincinnati, for several Eclectic medical journals; and to the officers of the Library of Congress, the library of the Department of Agriculture, the library of the office of the Surgeon General, Washington, the library of the Philadelphia College of Pharmacy, the library of the Franklin Institute, and the library of the College of Physicians of Philadelphia, for the use of periodicals not directly accessible to the compilers.

As indicated in the note under the general heading "Syrupi," the compilers are not responsible for the frequent use of the term "sirup" in place of the pharmacopœial title "syrup."

M. G. M.

M. I. W.

DIVISION OF PHARMACOLOGY,

HYGIENIC LABORATORY,

December 12, 1913.

LIST OF THE LITERATURE REVIEWED.

1. TITLE ABBREVIATIONS—JOURNALS.

- Am. Chem. J.—American Chemical Journal, Baltimore, 1912, v. 47, 48.
 Am. Druggist.—American Druggist and Pharmaceutical Record, N. Y., 1912, v. 60.
 Am. Food J.—American Food Journal (The), Chicago, Ill., 1912, v. 7.
 Am. J. Clin. Med.—American Journal of Clinical Medicine, 1912, v. 19.
 Am. J. M. Sc.—American Journal of the Medical Sciences, Philadelphia, 1912, v. 143, 144.
 Am. J. Pharm.—American Journal of Pharmacy, Philadelphia, 1912, v. 84.
 Am. J. Physiol.—American Journal of Physiology, Boston, 1912, v. 30.
 Am. J. Sc.—American Journal of Science, New Haven, 1912, v. 184.
 Am. Med.—American Medicine, 1912, v. 18.
 Am. Perf.—The American Perfumer and Essential Oil Review, N. Y., 1912-13, v. 7.
 Am. Vet. Rev.—American Veterinary Review, New York, 1911-1912, v. 39, 40.
 Analyst (The), London, 1912, v. 37.
 Ann. Bot.—Annals of Botany, London, 1912, v. 26.
 Ann. Chem.—Justus Liebig's Annalen der Chemie, Leipzig, 1912, v. 387-394.
 Ann. chim. analyt.—Annales de chimie analytique, Paris, 1912, v. 17.
 Ann. chim. et physiq.—Annales de chimie et de physique, 1912, 8th Ser., v. 25, 26, 27.
 Ann. falsif.—Annales des falsifications, Paris, 1912, v. 5.
 Ann. Pharm. Louvain.—Annales de Pharmacie, Louvain, 1912, v. 18.
 Ann. Rep. Lehn & Fink's Analyt. Dept.—Annual Report of Lehn & Fink's Analytical Department, New York, 1912.
 Ann. Rep. Missouri F. & D. Com.—Annual Report, Food and Drug Commissioner, Missouri, 1912.
 Ann. Rep. U. S. Dept. Agric.—Annual Report, U. S. Department of Agriculture, 1912, Washington, 1913.
 Apothecary (The), Boston, 1912, v. 24.
 Apoth.-Ztg.—Apotheker-Zeitung, Berlin, 1912, v. 27.
 Arb. k. Gsundtsamte.—Arbeiten aus dem kaiserlichen Gesundheitsamte, Berlin, 1912-13, v. 39-43.
 Arb. pharm. Inst. Univ. Berl.—Arbeiten aus dem pharmazeutischen Institut der Universität, Berlin, 1911, 1912, v. 9.
 Arch. exper. Path. u. Pharmakol.—Archiv für experimentelle Pathologie und Pharmakologie, 1912-13, v. 71.
 Arch. Int. Med.—Archives (The) of Internal Medicine, Chicago, 1912, v. 9, 10.
 Arch. Internat. pharmacod. et therap.—Archives internationales de pharmacodynamie et de thérapie, Brussels and Paris, 1912, v. 22.
 Arch. farmacol. sper.—Archivio di farmacologia sperimentale e Scienze affine, Siena, 1912, v. 13, 14.
 Arch. Pharm.—Archiv der Pharmazie, Berlin, 1912, v. 250.
 Arch. Pharm. og Chem. Copenhagen.—Archiv for Pharmaci og Chemi, Copenhagen, 1912, v. 19.

- Ber. deutsch. chem. Gesellsch.—Berichte der deutschen chemischen Gesellschaft, Berlin, 1912, v. 45.
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- Biochem. Ztschr.—Biochemische Zeitschrift, Berlin, 1912, v. 38–47.
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- Eclectic M. J.—*Eclectic Medical Journal*, Cincinnati, 1912, v. 72.
- Eighth Internat. Cong. Appl. Chem.—*Eighth International Congress of Applied Chemistry*, 1912, v. 1-29.
- Ellingwood's Therap.—*Ellingwood's Therapist*, Boston, 1912, v. 6.
- Ergeb. Physiol.—*Ergebnisse der Physiologie*, Wiesbaden, 1912, v. 12.
- Evans' An. Notes.—*Evans' Analytical Notes for 1912*, No. 7, Liverpool, 1913.
- Exper. Sta. Rec.—*Experiment Station Record*, U. S. Department of Agriculture, 1912, v. 26, 27.
- F. I. D.—*Food Inspection Decision*, U. S. Department of Agriculture, 1912, No. 139-149.
- Fortschr. Chem.—*Fortschritte der Chemie, Physik und Physikalischen Chemie*, Leipzig, 1912, v. 5, 6.
- Hahnemann. Month.—*Hahnemannian Monthly*, Philadelphia, 1912, v. 47.
- Handelsbericht. Gehe & Co., Dresden, 1912.
- Hyg. Rundschau.—*Hygienische Rundschau*, Berlin, 1912, v. 22.
- Index Medicus, Washington, 1912, v. 10.
- Jahres-Ber.—*Jahres-Bericht von Caesar & Loretz*, Halle a. S. 1912.
- J. H. Hosp. Bull.—*Johns (The) Hopkins Hospital Bulletin*, Baltimore, 1912, v. 23.
- J. Adv. Therap.—*Journal (The) of Advanced Therapeutics*, New York, 1912, v. 30.
- J. Agric. trop.—*Journal d'Agriculture tropicale*, Paris, 1912, v. 12.
- J. Am. Chem. Soc.—*Journal of the American Chemical Society*, Easton, 1912, v. 34.
- J. Am. Inst. Homœop.—*Journal of the American Institute of Homœopathy*, N. Y., 1911-1912, v. 4.
- J. Am. M. Assoc.—*Journal of the American Medical Association*, Chicago, 1912, v. 58, 59.
- J. Am. Pharm. Assoc.—*Journal of the American Pharmaceutical Association*, Columbus, 1912, v. 1.
- J. Biol. Chem.—*Journal of Biological Chemistry*, New York, 1912, v. 11, 12, 13.
- J. Chem. Soc. Lond.—*Journal of the Chemical Society*, London, 1912, No. 100, 101.
- J. chim. phys.—*Journal de Chimie Physique*, Genève et Paris, 1911, v. 9.
- J. Exper. M.—*Journal of Experimental Medicine*, New York, 1912, v. 15, 16.
- J. Frankl. Inst.—*Journal (The) of the Franklin Institute*, Philadelphia, 1912, v. 173, 174.
- J. Ind. & Eng. Chem.—*Journal (The) of Industrial and Engineering Chemistry*, Easton, 1912, v. 4.
- J. Infect. Dis.—*Journal (The) of Infectious Diseases*, Chicago, 1912, v. 10, 11.
- J. Med. Research.—*Journal of Medical Research*, Boston, 1912-1913, v. 27.
- J. pharm. Anvers.—*Journal de pharmacie . . . d'Anvers*, 1912, v. 68.
- J. Pharm. Elsass-Lothr.—*Journal der Pharmacie von Elsass-Lothringen*, 1912, v. 39.
- J. Pharm. et chim.—*Journal de pharmacie et de chimie*, Paris, 1912, v. 5, 6.
- J. Pharm. Soc. Japan.—*Yakugakuzasshi (Journal of the Pharmaceutical Society of Japan)*, 1912.
- J. Pharmacol. & Exper. Therap.—*Journal of Pharmacology and Experimental Therapeutics*, Baltimore, 1912-13, v. 4.
- J. Phys. Chem.—*Journal (The) of Physical Chemistry*, Ithaca, N. Y., 1912, v. 16.
- J. Physiol. Lond.—*Journal of Physiology*, London, 1912, v. 44.
- J. physiol. et path. gén.—*Journal de physiologie et de pathologie générale*, Paris, 1912, v. 14.

- J. prakt. Chem.—Journal für praktische Chemie, Leipzig, 1912, v. 85, 86.
- J. Soc. Chem. Ind.—Journal of the Society of Chemical Industry, London, 1912, v. 31.
- Lab. Notes.—Johnson & Johnson, Laboratory Notes, Analytical Methods, 1912.
- Lancet (The), London, 1912, v. 182, 183.
- Med. Rec.—Medical Record, New York, 1912, v. 81, 82.
- Merck's Arch.—Merck's Archives, New York, 1912, v. 14.
- Merck's Rep.—Merck's Report, New York, 1912, v. 21.
- Meyer Bros. Drug.—Meyer Brothers Druggist, St. Louis, 1912, v. 33.
- Midl. Drug.—Midland Druggist and Pharmaceutical Review, Columbus, 1912, v. 46.
- Monatsh. Chem.—Monatshefte für Chemie, Vienna, 1912, v. 33.
- Monit. Scientif.—Le Moniteur Scientifique, Paris, 1912, v. 76, 77.
- Montreal Pharm. J.—Montreal Pharmaceutical Journal, 1912, v. 23.
- N. A. R. D. Notes.—The Journal of the National Association of Retail Druggists, Chicago, 1912, v. 14, 1912–1913, v. 15.
- Nat. Druggist.—National (The) Druggist, St. Louis, 1912, v. 42.
- Nat. Eclect. M. Assoc. Quart.—The National Eclectic Medical Association Quarterly, Cincinnati, 1912, v. 4.
- New Idea (The), Detroit, 1912, v. 34.
- N. York M. J.—New York Medical Journal, 1912, v. 95, 96.
- Northwestern Druggist (The), Minneapolis, 1912, v. 13.
- Notices of Judgment, U. S. Department of Agriculture, 1912, No. 1199–1832.
- Nouv. remèdes.—Nouveaux remèdes, Paris, 1912, v. 29.
- Oil, Paint, and Drug Reporter, New York, 1912, v. 81, 82.
- Öster. Sanitätswesen.—Das Österreichische Sanitätswesen, Wien, 1912, v. 24.
- Pacific Drug Rev.—Pacific (The) Drug Review, Portland, 1912, v. 24.
- Pacific Pharm.—Pacific (The) Pharmacist, San Francisco, 1912, v. 6.
- Pflanzer (Der), Tanga, 1912, v. 8.
- Pharm. Era.—Pharmaceutical (The) Era, New York, 1912, v. 45.
- Pharm. J.—Pharmaceutical (The) Journal, London, 1912, v. 88, 89.
- Pharm. Post.—Pharmazeutische Post, Wien, 1912, v. 45.
- Pharm. Praxis.—Pharmazeutische Praxis, Wien und Leipzig, 1912, v. 11.
- Pharm. Weekblad.—Pharmaceutish Weekblad, Amsterdam, 1912, v. 49.
- Pharm. Ztg.—Pharmazeutische Zeitung, Berlin, 1912, v. 57.
- Pharm. Zentralh.—Pharmazeutische Zentralhalle für Deutschland, Dresden, 1912, v. 53.
- Philippine J. Sc.—Philippine (The) Journal of Science, Manila, 1912, v. 7.
- Phys. Drug News.—Physicians Drug News, Newark, 1912, v. 7.
- Pract. Drug.—Practical (The) Druggist and Pharmaceutical Review of Reviews, New York, 1912, v. 30.
- Practitioner (The) London, 1912, v. 88, 89.
- Proc. Am. Philosoph. Soc.—Proceedings of the American Philosophical Society, Philadelphia, 1912, v. 51.
- Proc. N. A. M. M. P.—Proceedings of the National Association of Manufacturers of Medicinal Products, 1913, v. 1.
- Proc. N. W. D. A.—Proceedings of the National Wholesale Druggists' Association, New York, 1912, v. 38.
- Proc. Roy. Soc. Lond.—Proceedings of the Royal Society, London, 1912, v. 86.
- Proceedings of State pharmaceutical associations:
- Proc. Alabama Pharm. Assoc. 1912.
 - Proc. California Pharm. Assoc. 1912.
 - Proc. Connecticut Pharm. Assoc. 1912.

- Proc. Florida Pharm. Assoc. 1912.
 Proc. Georgia Pharm. Assoc.
 Proc. Illinois Pharm. Assoc. 1912.
 Proc. Indiana Pharm. Assoc. 1912
 Proc. Iowa Pharm. Assoc. 1912.
 Proc. Kansas Pharm. Assoc. 1912.
 Proc. Kentucky Pharm. Assoc. 1912.
 Proc. Louisiana Pharm. Assoc. 1912.
 Proc. Maine Pharm. Assoc. 1912.
 Proc. Maryland Pharm. Assoc. 1912.
 Proc. Massachusetts Pharm. Assoc. 1912.
 Proc. Michigan Pharm. Assoc. 1912.
 Proc. Minnesota Pharm. Assoc. 1912.
 Proc. Mississippi Pharm. Assoc. 1912.
 Proc. Missouri Pharm. Assoc. 1912.
 Proc. Nebraska Pharm. Assoc. 1912.
 Proc. New Jersey Pharm. Assoc. 1912.
 Proc. New York Pharm. Assoc. 1912.
 Proc. North Carolina Pharm. Assoc. 1912.
 Proc. North Dakota Pharm. Assoc. 1912.
 Proc. Ohio Pharm. Assoc. 1912.
 Proc. Pennsylvania Pharm. Assoc. 1912.
 Proc. South Carolina Pharm. Assoc. 1912.
 Proc. South Dakota Pharm. Assoc. 1912.
 Proc. Tennessee Pharm. Assoc. 1912.
 Proc. Texas Pharm. Assoc. 1912.
 Proc. Vermont Pharm. Assoc. 1912.
 Proc. Virginia Pharm. Assoc. 1912.
 Proc. Washington Pharm. Assoc. 1912.
 Proc. West Virginia State Pharm. Assoc. 1912.
 Proc. Wisconsin Pharm. Assoc. 1912.
 Public Health Rep.—Public Health Reports, Washington, 1912, v. 27.
 Répert. pharm.—Répertoire de Pharmacie, Paris, 1912, v. 24.
 Rep. Chem. Lab. Am. M. Assoc.—Reports of the Chemical Laboratory of the American Medical Association, Chicago, 1912, v. 5.
 Rep. Colorado Bd. Health.—Report of the Colorado State Board of Health, 1912.
 Rep. Conn. Agric. Exper. Sta.—Report of the Connecticut Agricultural Experiment Station, New Haven, 1912.
 Rep. Connecticut Bd. Health.—Report of the State Board of Health of Connecticut, 32d, 1912.
 Rep. Connecticut D. & F. Com.—Report of the Dairy & Food Commissioner, Connecticut, 1912.
 Rep. Council Pharm. & Chem.—Reports of the Council on Pharmacy and Chemistry, American Medical Association, 1912.
 Rep. District of Columbia, Health Off.—Report of the Health Officer of the District of Columbia, 1912, Washington, 1913.
 Rep. Florida Bd. Health.—Report, Florida State Board of Health, Jacksonville, 1912.
 Rep. Indiana Bd. Health.—Report of the Indiana State Board of Health, 1912.
 Rep. Jacksonville, Florida, Bd. Health.—Report of the Jacksonville, Florida, Board of Health, 1912.
 Rep. Kansas Bd. Health.—Report of the State Board of Health, Kansas, Biennial, 1912.

- Rep. Kentucky Agric. Exper. Sta.—Report of the Director of the Kentucky Agricultural Experiment Station, 1912.
- Rep. Local Govt. Bd. Lond.—Report of the Local Government Board, Supplement, Report of the Medical Officer, London, 1912, 41st.
- Rep. Maryland D. & F. Com.—Report of the State Food and Drug Commissioner, Maryland, 1911, 1912, Baltimore, 1913.
- Rep. Massachusetts Bd. Health.—Report of the Massachusetts State Board of Health, Boston, 1912.
- Rep. Missouri Bot. Gard.—Report, Missouri Botanical Garden, 23d Annual, 1911, St. Louis, 1912.
- Rep. New Hampshire Bd. Health.—Report of the State Board of Health of the State of New Hampshire, Biennial, 1912.
- Rep. New Jersey Bd. Health.—Report of the Board of Health of the State of New Jersey, 1912.
- Rep. North Dakota Agric. Exper. Sta.—Report, North Dakota Agric. Exper. Sta., Bismarck, 1912.
- Rep. Ohio D. & F. Com.—Report of the Ohio Dairy and Food Commissioner, 1911, Columbus, 1912.
- Rep. Oklahoma P. H. Dept.—Report, Oklahoma State Public Health Department, Oklahoma City, Biennial, 1912.
- Rep. South Dakota F. & D. Com.—Report of the Food & Drug Commissioner to the Governor of the State of South Dakota, 1912.
- Rep. Tennessee Bd. Health.—Report of the Tennessee Board of Health, Biennial, 1912.
- Rep. Texas Bd. Health.—Report of the Texas State Board of Health, Austin, Biennial, 1912.
- Rep. Texas D. & F. Com.—Report of the Dairy and Food Commissioner of Texas, 1912.
- Rep. Vermont Bd. Health.—Report of the State Board of Health of the State of Vermont, 1912.
- Rep. Wisconsin D. & F. Com.—Report of the Dairy and Food Commissioner of Wisconsin, 1912.
- Repr. Therap. Res. Com.—A reprint of the Investigations carried out under the Supervision of the Therapeutic Research Committee of the Council on Pharmacy and Chemistry of the American Medical Association, 1912.
- Rev. Am. Farm. y Med.—Revista Americana de Farmacia y Medicina, New York, 1912, v. 16.
- Rev. Farm.—Revista Farmaceutica, Buenos Aires, 1912, v. 55.
- Riedel's Berichte, Berlin, 1912.
- Riedel's Mentor, Berlin, 1912.
- Rocky Mountain Druggist (The), Denver, 1912, v. 26.
- Schweiz. Wehnschr. Chem. u. Pharm.—Schweizerische Wochenschrift für Chemie und Pharmacie, Zürich, 1912, v. 50.
- Sc. Am. Suppl.—Scientific American Supplement, New York, 1912, v. 73, 74.
- Sc. & Ind. Bull.—Scientific and Industrial Bulletin of Roure-Bertrand Fils of Grasse, 1912.
- Semi-Ann. Rep.—Semi-Annual Report, Schimmel & Co., Miltitz, 1912.
- Southall Bros. & Barclay—Nineteenth Laboratory Report, 1912, Birmingham, 1913.
- Southern Pharm. J.—Southern (The) Pharmaceutical Journal, Dallas, 1911–12, v. 4.
- Spatula (The), Boston, 1911–1912, v. 18.
- Südd. Apoth.-Ztg.—Süddeutsche Apotheker-Zeitung Stuttgart, 1912, v. 52.
- Svensk farm. Tidskr.—Svensk farmaceutisk Tidskrift, Stockholm, 1912, v. 16.

- Therap. Gaz.—Therapeutic Gazette, Detroit, 1912, v. 36.
 Therap. Gegenw.—Therapie der Gegenwart, Berlin, 1912, v. 53.
 Therap. Monatsh.—Therapeutische Monatshefte, Berlin, 1912, v. 26.
 Therapist (The), London, 1912, v. 22.
 Tr. Am. Inst. Chem. Eng.—Transactions of the American Institute of Chemical Engineers, New York, 1912, v. 5, 1913.
 Tr. Am. M. Assoc. Sec. Pharm. & Therap.—Transactions of the Section on Pharmacology and Therapeutics of the American Medical Association, Chicago, 1912.
 Tropenpflanzer (Der), Berlin, 1912, v. 16.
 Vet. J.—Veterinary Journal, London, 1912, v. 68.
 Western Druggist (The), Chicago, 1912, v. 34.
 Year-Book of Pharmacy and Transactions of the British Pharmaceutical Conference, London, 1912.
 Ztschr. allg. österr. Apoth.-Ver.—Zeitschrift des allgemeinen österreichischen Apotheker-Vereines, Vienna, 1912, v. 50.
 Ztschr. anal. Chem.—Zeitschrift für analytische Chemie, Wiesbaden, 1912, v. 51.
 Ztschr. ang. Chem.—Zeitschrift für angewandte Chemie, Berlin, 1912, v. 25.
 Ztschr. anorg. Chem.—Zeitschrift für anorganische Chemie, Hamburg, 1912–13, v. 76, 79, 80.
 Ztschr. Chem. u. Ind. Koll.—Zeitschrift für Chemie und Industrie der Kolloide, 1912, v. 10, 11.
 Ztschr. exper. Path. u. Therap.—Zeitschrift für experimentelle Pathologie und Therapie, Berlin, 1912, v. 10, 11.
 Ztschr. öffentl. Chem.—Zeitschrift für öffentliche Chemie, Plauen, i. V. 1912, v. 18.
 Ztschr. physik. Chem.—Zeitschrift für physikalische Chemie, Leipzig, 1912, v. 79, 80.
 Ztschr. physiol. Chem.—Zeitschrift für physiologische Chemie, Hoppe-Seyler, Strassburg, 1912, v. 77, 78, 79, 80, 81, 82.
 Ztschr. Unters. Nahr. u. Genussm.—Zeitschrift für Untersuchung der Nahrungs- und Genussmittel, Berlin, 1912, v. 23, 24.
 Zentralbl. Biochem. u. Biophysik—Zentralblatt für Biochemie und Biophysik, Leipzig, 1912, v. 13.
 Zentralbl. exper. Med.—Zentralblatt der experimentellen Medizin, Berlin & Vienna, 1912, v. 1, 2.
 Zentralbl. Physiol.—Zentralblatt für Physiologie, Leipzig und Wien, 1912, v. 26.

2. TITLE ABBREVIATIONS—PHARMACOPŒIAS AND NONOFFICIAL STANDARDS.

- Ph. Arg. I.—Farmacopea Nacional Argentina, Primera edición, 1898.
 Ph. Austr. VIII.—Pharmacopœa Austriaca, editio octava, 1906.
 Ph. Belg. III.—Pharmacopœa Belgica, editio tertia, 1906.
 Ph. Brit. IV.—British Pharmacopœia, 1898.
 Ph. Chil. I.—Farmacopea Chilena, 1886.
 Ph. Dan. VII.—Pharmacopœa Danica, 1907.
 Ph. Fr. V.—Codex Medicamentarius Gallicus, Pharmacopée Française, 1908.
 Ph. Germ. V.—Deutsches Arzneibuch, 5. Ausgabe, 1910.
 Ph. Helv. IV.—Pharmacopœa Helvetica, editio quarta, 1907.
 Ph. Hisp. VII.—Farmacopea Oficial Española, séptima edición, 1905.
 Ph. Hung. III.—Pharmacopœa Hungarica, editio tertia, 1909.
 Ph. Ital. III.—Farmacopea ufficiale del regno d'Italia, Terza edizione, 1909.

- Ph. Japon. III.—The Pharmacopœia of Japan, 1906 (English translation, 1907).
 Ph. Mex. IV.—Nueva Farmacopea Mexicana, cuarta edición, 1904.
 Ph. Ndl. IV.—Pharmacopœa Nederlandica, editio quarta, 1905.
 Ph. Ross. VI.—Pharmacopœa Rossica, sixth edition, 1910.
 Ph. Serb. II.—Pharmacopœa Serbica, editio secunda, 1908.
 Ph. Svec. IX.—Svenska Farmakopén (Pharmacopœa Svecica, ed. IX), 1908.
 Ph. Ven. I.—Farmacopea Venezolana, 1898.
 U. S. P. VIII.—Pharmacopœia of the United States, 8th Dec. Rev. 1905.
 N. F. III.—The National Formulary of Unofficial Preparations, Baltimore, 1906.
 N. N. R.—New and Nonofficial Remedies, Chicago, 1912.
 B. P. C.—British Pharmaceutical Codex, London, 1911.

DIGEST OF COMMENTS ON THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA, VIII, AND ON THE NATIONAL FORMULARY III.¹

I. GENERAL COMMENTS.

1. LEGAL STATUS AND DEVELOPMENT.

1. PURE FOOD AND DRUGS LAW.

Wilson, James: The provisions of the food and drugs act have been vigorously enforced during the year, and 1,459 violations were reported to the Department of Justice, an increase of more than 25 per cent over the number reported last year.—Ann. Rep. U. S. Dept. Agric. 1912, Washington, 1913, p. 32.

Kraemer, Henry: The enactment and enforcement of National and State laws relating to drugs and medicines is, perhaps, the most important of the several factors contributing to an improvement in the quality of drugs.—Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1912, p. 147.

Biebinger, O. L.: The operation of the food and drugs laws and the thorough and aggressive way in which they have been enforced, have reduced to a very low minimum the number of drugs and chemicals that are so adulterated as to render them unfit for use.—Proc. N. W. D. A. 1912, p: 235.

Johnson & Johnson: The advent of the pure food and drugs act has placed upon many sources of supplies such restrictions that in order to do business it is necessary to know something about the qualities of the materials manipulated.—Lab. Notes, 1912, p. 3.

Dohme and Engelhardt: The good effect which the pure food law has had on the quality of crude drugs is highly appreciated, spurious and almost worthless specimens being now very rarely met with on the market.—J. Am. Pharm. Assoc., 1912, v. 1, p. 103.

Bigelow, W. D.: Some of the results of the food and drugs act.—Eighth Internat. Cong. Appl. Chem. 1912, v. 18, p. 57-64.

Hiltner, Robert S.: Among the 1,250 Notices of Judgment published by the Secretary of Agriculture, covering a period of five years, 309 have to do with drug products. In only 55 of the cases could charges of adulteration be made.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 166.

¹ Manuscript submitted for publication Dec. 16, 1913.

Meyer, Theodore F.: The members of this association and the legitimate drug trade generally will welcome the Sherley amendment.—*Proc. N. W. D. A.* 1912, p. 54; see also p. 215.

Teeters, Wilber J.: Summary of State drug legislation for the year.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 943. See also *Proc. N. W. D. A.* 1912, p. 219 ff.

Hower and Barman: It is recommended that the food and drugs laws be so amended as to include inspection of drugs wherever found, sold, or dispensed in Ohio.—*Rep. Ohio D. & F. Com.* 1912, 1913, p. 22.

Schneider, Albert: Most of the men in charge of Federal and State pure food and drugs laboratories know little or nothing about drugs, which explains why much of the drug work outlined and directed by them has no special value as far as the correction of the existing evils may be concerned.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1200.

Hiltner, Robert S.: To enforce the pure food and drugs act in respect to drugs will require more courage, more money, and a higher order of chemical knowledge than in respect of foods, because of the relative difficulties of the problems involved.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 307.

Ladd, E. F.: Publicity for the work of food and drug inspection is an important factor in the enforcement of laws.—*Am. Food. J.* 1912, v. 7, July, pp. 21–22.

Cook, Alfred N.: By giving a preliminary warning as to the samples that would be taken for analysis, it is expected to enforce the food and drugs law with the least possible inconvenience to the druggist.—*Bull. No. 25, South Dakota F. & D. Dept.* 1912, p. 1.

Hoover, W. A.: There are many problems yet to be solved in the administration and conduct of the food and drugs law.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1067.

Sayre, L. E.: The lack of coordination between Federal and State authorities, and between the various State authorities, constitutes the weakest point in drug reform administration.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 469.

Stewart, F. E.: The moment the products of the manufacturer are opened the manufacturer can no longer be held responsible either by the pharmacist or by the public, and the pharmacist's personal guaranty is, therefore, necessary to the welfare of the community.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1451.

Rusby, H. H.: In enforcing the pure food and drugs law, the worst difficulty is the incompleteness and imperfectness of the descriptions in the Pharmacopœia.—*Proc. New York Pharm. Assoc.* 1912, p. 137.

Wallace, John C.: A summary of the method of enforcement of the food and drugs laws in the different States.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 939.

McCabe, George P.: During the past year the first jail sentence was imposed for a violation of the food and drugs act, the defendant being found guilty of adulterating liquor with methyl alcohol.—Ann. Rep., U. S. Dept. Agric. 1912, Washington, 1913, p. 896.

Lloyd, John Uri: The possible abuses of "Guaranteed under the food and drugs act."—*Eclectic M. J.* 1912, v. 72, p. 373.

Wilson, James: Six hundred and fifty-five Notices of Judgment of terminated cases have been published, and over 300 are in course of preparation.—Ann. Rep. U. S. Dept. Agric. 1912, Washington, 1913, p. 33.

Muttele, F.: Abstracts of recent judgments under the United States food and drugs act.—*Bull. Internat. Rep. Fraudes*, 1912, v. 5, pp. 93-96, 131-134, 181-185, 256-261, 358-363.

2. POISONS AND NARCOTICS.

Hilton, S. L.: The failure of pharmacy laws and the need for further restricting the sale of narcotic drugs.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 1135-1137.

Short, William: Evidence before the Royal Commission that there ought to be some restriction on the use of hypodermic syringes and tablets for hypodermic injections.—*Pharm. J.*, 1912, v. 88, p. 736.

Stephens, A. F.: Strict supervision over the sale of all narcotic and pain relieving drugs is urged, and for evasion of the law revocation of license both to the physician and the druggist.—*Nat. Eclect. M. Assoc. Quart.*, 1912-13, v. 4, p. 40.

Anon.: Proposed ruling of the Board of Food and Drugs Inspection, regulating the importation and sale of opium, morphine, cocaine, coca, their derivatives and preparations.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 77-79; also a criticism by Beringer, Geo. M., p. 79-81.

Heiduschka, A.: The nature of poisons and some of the available definitions of a poison.—*Apoth.-Ztg.*, 1912, v. 27, p. 779-782.

Hiltner, Robert S.: A very large proportion of the known drugs are poisonous and hence would be deleterious. Many of them are potent, virulent poisons.—*Rocky Mountain Druggist*, 1912, v. 26, March, p. 10.

Wilbert, M. I.: The evolution of laws regulating the sale and use of poisons.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 1259-1261.

Thompson, Ashburton: Exemption from declaration as to ingredients should be granted in the case of proprietary medicines which have been on the market for a number of years and have not proved harmful.—*Pharm. J.*, 1912, v. 88, p. 736.

Mittelbach, William: The exemption of certain poisons used in the arts and as insecticides removes the protection to the public that the poison law contemplates.—*Proc. Missouri Pharm. Assoc.*, 1912, p. 131.

Barman and Hower: Carelessness in keeping poison records is very general among druggists, especially in the larger towns and cities.—Rep. Ohio D. & F. Com., 1911, 1912, p. 19.

Anon.: Illustrations of several forms of poison bottle used in Great Britain.—Pharm. Ztg., 1912, v. 57, p. 322-323.

Wilbert, M. I.: The need for further restricting the sale of poisons and habit-forming drugs.—Proc. Pennsylvania Pharm. Assoc., 1912, p. 284-287; also Am. J. Pharm., 1912, v. 84, p. 302-305.

Lilly, J. K.: Both in State and Federal legislation we are going to have within the next few years a very material increase in the burden placed upon pharmacists in regard to the manufacture and distribution of these habit-forming drugs.—Proc. N. A. M. M. P., 1912, p. 68.

Hoover, W. A.: The branches of the drug trade are anxious to cooperate to bring about statutory enactments that are practical and possible of execution.—J. Am. Pharm. Assoc., 1912, v. 1, p. 1067.

Freericks, Frank H.: Proposed national legislation affecting pharmacy. Disussion of the Foster and Mann antinarcotic bills.—J. Am. Pharm. Assoc., 1912, v. 1, p. 142-146.

Hilton, S. L.: Some provision covering interstate shipment of narcotic drugs is badly needed and should be enacted in the near future.—J. Am. Pharm. Assoc., 1912, v. 1, p. 1410-1413.

Anderson, W. C.: Discussion of the proposed Harrison antinarcotic bill.—Proc. New York Pharm. Assoc., 1912, p. 230.

Siggins, F. M.: Opium or cocaine are not one-half so deadly as coal tar, for while they openly show what they can do, the other works silently until the end is near.—Proc. Pennsylvania Pharm. Assoc., 1912, p. 197.

Anon.: A review of the dangers of the work in chemical industries.—Chem. Ind., 1912, v. 35, p. 233-237, 281-286, 328-335, 402-407, 440-443.

Winslow, C.-E. A.: The prevention of industrial poisonings.—Eighth Internat. Cong. Appl. Chem., 1912, v. 26, p. 309-318.

Thompson, W. Gilman: Occupational poisoning in chemical trades. An inquiry as to the extent to which such diseases prevail in New York City.—J. Ind. & Eng. Chem., 1912, v. 4, p. 454-457.

Uhlig, E. C.: The physician is not a proper person to suggest to a manufacturer such changes in his processes as will eliminate the causes of the peculiar occupational ills to which his employees are subject.—J. Ind. & Eng. Chem., 1912, v. 4, p. 480.

Wilbert and Motter: Digest of laws and regulations in force in the United States relating to the possession, use, sale, and manufacture of poisons and habit-forming drugs.—Public Health Bulletin No. 56, pp. 278.

3. THE PHARMACOPŒIA AS A LEGAL STANDARD.

Meeker, G. H.: The United States Pharmacopœia and the National Formulary are the standards set by the pharmaceutical profession for itself, and both are recognized by the Federal Government in connection with the Federal food and drugs act.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 290.

Scoville, Wilbur L.: The present plan of the Pharmacopœia of making a minimum standard of a drug the real standard for that drug is not a satisfactory plan.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 1338-1341.

Rusby, H. H.: The continuation of the errors included in the U. S. P. VIII has seriously crippled the work of the administrators of the drug statutes.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 947-953.

Kebler, L. F.: The Pharmacopœia is the law and standard, but with the present construction of the law one is inclined to wish that there was no Pharmacopœia.—*J. Am. M. Assoc.*, 1912, v. 59, p. 1165.

Editorial: Not since the United States Pharmacopœia was made the Government standard under the pure food and drugs act has the intent of the framers of the law been so riddled as by the decision of Judge Hand of New York in the case of *J. L. Hopkins & Co.*, drug importers, with reference to broken senna.—*Pharm. Era*, 1912, v. 45, p. 433.

Rusby, H. H.: There is the greatest need of some carefully studied provision of the Pharmacopœia for specifying just when and how articles differing from the standard may be admitted for "Technical" use.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 373.

4. SUPPLEMENT TO THE PHARMACOPŒIA.

Meeker, G. H.: There is a crying need for a supplement to the Pharmacopœia, in which with respect to each standard set therein the reason for that standard should be clearly stated.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 290.

Rusby, H. H.: The preface should contain a clear statement that published supplements are parts of the edition then official, and such supplements, embodying new tests, should be published not less frequently than once a year.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 951.

Remington, Joseph P.: If the chairman's plan is adopted, the book can be kept up to date by publishing in the journals, when it is necessary, any corrections as they develop.—*Am. Druggist*, 1912, v. 60, p. 275.

5. UNITED STATES PHARMACOPŒIAL CONVENTION.

Bernegau and E'Ve: A few suggestions for the Ninth Decennial Revision of the United States Pharmacopœia.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 123-127.

Diekman, George C.: The Convention adopted the Declaration of Ethical Principles. It was finally decided not to print ethical rules anywhere in the Pharmacopœia.—*Proc. New York Pharm. Assoc.* 1912, p. 108.

Editorial: The work of the Committee of Revision does not begin until after the convention, and it has required a few years to complete the work of revision. In this way the revised Pharmacopœia makes its appearance much less than 10 years before the next decennial convention. As a consequence, the demand for a supplement is much less than it would be if the pharmaceutical interests did not realize that a convention is to be held just about the time that a supplement might be expected.—*Meyer Bros. Drug.* 1912, v. 33, p. 98.

6. GENERAL PRINCIPLES.

Oldberg, Oscar: The national pharmacopœia of any country is a document so important that careful consideration should be given to all of the general questions involved.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 149.

Meeker, George H.: The necessity for giving publicity to the progress of revision, and the reasons for making changes.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 108.

Remington, Joseph P.: The subject of nomenclature has been settled by the Executive Committee on the basis of the recommendation embodied in the list of general principles. [See *Hyg. Lab. Bull.* 84, p. 42.]—*Am. J. Pharm.* 1912, v. 84, p. 452.

7. PUBLICATION AND CONTROL.

Jones, D.: While the revision committee of the U. S. P. are diligently at work, there is as yet no knowledge as to when we can look for the appearance of the new book.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 19.

Remington, Joseph P.: It is not surprising in pharmacopœia work to hear criticisms in certain quarters asking definite information and date for the appearance of the new book. While every effort should be made persistently and continuously to push the work, great patience is required in order that hasty conclusions or incorrect guesses be eliminated.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 806.

England, J. W.: The chairman of the committee on publication recommends delay in publication of the National Formulary until the time arrives for the publication of the ninth revision of the U. S. Pharmacopœia.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1102.

S. THE PHYSICIAN AND THE PHARMACOPŒIA.

Editorial: Physicians who are interested in the progress of medicine have always contended that the Pharmacopœia should contain only good drugs that are of practical value to the physician.—*J. Am. M. Assoc.* 1912, v. 59, p. 291.

Remington, J. P.: While it is true that there are plenty of things in the Pharmacopœia that the doctors in Chicago never thought of using, it is equally true that the doctors in Texas or somewhere else do use them largely; and the doctor there is just as much entitled to a standard for his preparations as the doctor in Chicago, or Philadelphia, or New York, who has never heard of these articles.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1349.

Pritchard, B. E.: Physicians do not know the value and uses of the Pharmacopœia and expect the pharmacist to stand between them and the dishonest manufacturer and chemist.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 185.

Rusby, H. H.: Some of the U. S. P. standards are directly opposed to useful medical practice, and many of them are based wholly on conjecture or mere legendary belief.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 947-953.

Calvin, W. D.: While the medical practitioner does not believe less in drug therapy than he did when he left college, he has much less confidence in most of the drugs of the Pharmacopœia than he had at that time.—*J. Am. M. Assoc.* 1912, v. 59, p. 1164.

Goodman, E.: A pharmacopœia along old lines is no longer sufficient if druggists and physicians no longer want to be bound to certain remedies for 10 years.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 292-294.

Wilbert, M. I.: The present misuse of medicines has been characterized as consisting of a series of vicious circles: Patent medicines are used by the laity because they are advertised by manufacturers and they are advertised by manufacturers because they are used by the laity. The closely related proprietary medicines are prescribed by physicians because they are advertised in medical journals and they are advertised in medical journals because this leads to their being prescribed by physicians. Official remedies are official because they are endorsed by textbooks and are endorsed by textbooks because they are official.—*J. Am. M. Assoc.* 1912, v. 59, p. 1163.

9. THE PHARMACOPŒIA AS A TEXTBOOK.

Goodman, E.: The original design of the Pharmacopœia was a standard for pharmacy and a guide book for physicians.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 292.

Engelhardt, H.: As the Pharmacopœia is written primarily for the pharmacist, it should contain methods of examination that can be readily carried out in the pharmacy with simple apparatus. These methods should give results which, while not theoretically accurate, are sufficiently so for all practical purposes.—*D.-A. Apoth.-Ztg.* 1912, v. 33, p. 131.

Sayre, L. E.: The frequent designation of the Pharmacopœia as the medical Bible is becoming more and more appropriate, because so few are familiar with its pages.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1123.

Cook, Alfred N.: The druggist should not, under any circumstances, fail to provide himself with the latest Pharmacopœia and the National Formulary.—*Rep. South Dakota F. & D. Com.* 1912, p. 75.

Barman and Hower: Practically all stores visited have a complete pharmaceutical library, consisting of a U. S. Pharmacopœia, U. S. Dispensatory, National Formulary, or Remington's Practice of Pharmacy.—*Rep. Ohio D. & F. Com.* 1911, 1912, p. 19.

10. U. S. P. CONVENTION REPRESENTATION.

Remington, Joseph P.: The Committee of Revision began its work two years ago, on the lines laid down by the Pharmacopœial Convention, at which the doctors of the country were fully represented. There is no justification in this proposition to bring about a new plan of procedure at this time, a plan which is impossible of accomplishment.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1222.

11. VALUE OF CRITICISM.

Sayre, L. E.: Comments on the U. S. P. and N. F. should not only be fostered, but means should be devised to stimulate and to better systematize the work in this line. Just now, no other work in pharmacy is quite so important.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1123.

Remington, Joseph P.: Now is the time to send the chairman suggestions, criticisms, and comments in order that they may be thoroughly considered.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 806.

Editorial: Review of *Hyg. Lab. Bull.* 79. American Government departments generally are subjects of circumlocution and red tape, like our own; but the United States has at least a distinction

to which we have no parallel: Its Pharmacopœia is published at stated intervals, it is constantly under revision, and the Government shares in the work.—Chem. & Drug. 1912, v. 80, p. 811.

Book review, Hyg. Lab. Bull. 79: It is to be regretted that the bulletins can not be issued promptly and brought up to date. The nature of the work and government methods, however, seem to render this impossible.—Meyer Bros. Drug. 1912, v. 33, p. 148.

Raubenheimer, Otto: A review of Hyg. Lab. Bull. No. 84.—J. Am. Pharm. Assoc. 1912, v. 1, p. 797-798.

Kremers, Edward: To the pharmaceutical scientist, the "Digest of Comments" is not a working collection of abstracts; it is a catalogue somewhat after the supplemental volumes to the "Beilstein" of the organic chemist. Hence its principal merit lies in its completeness as such a catalogue of references.—J. Am. Pharm. Assoc. 1912, v. 1, p. 405.

Book review: The Digest of Comments is of greatest value as a book of reference as it forms in many respects a much more complete review of the literature in question than does the "Jahresbericht der Pharmazie."—Ber. pharm. Gesellsch. 1912, v. 22, p. 556-557.

12. COMMITTEE OF REVISION.

Rusby, H. H.: Many of the members of the Committee of Revision have no clear idea of the importance of providing in the present revision work for the legal snags of administration.—J. Am. Pharm. Assoc. 1912, v. 1, p. 948.

Meeker, George H.: While the committee confers with many manufacturers and scientific specialists, the profession as a whole neither participates in these conferences nor has ready access to the facts. The continuance of such a course is not only unwarrantable, but also dangerous and unjust.—J. Am. Pharm. Assoc. 1912, v. 1, p. 109.

Remington, Joseph P.: The assistance which has been given to the present committee by the large number of comments and criticisms made on the present book does not tend toward rapid progress. While previous revisions suffered from absence of suggestions or comments the present revision is somewhat embarrassed by many diverse and contradictory suggestions. There is no way of compromising any such advice. One must be taken and the other left.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 141.

13. NATURE AND PROGRESS OF REVISION.

Editorial: Pharmacists and physicians are exhibiting a rude curiosity to know what the Committee of Revision is doing.—Western Druggist, 1912, v. 34, p. 265.

Remington, Joseph P.: A comprehensive report on the progress that is being made; up to the time that this report was compiled no less than 4,529 pages of official communications had been sent out to the members of the revision committee.—*American Druggist*, 1912, v. 60, p. 275-276; see also *Proc. Pennsylvania Pharm. Assoc.* 1912, p. 139-142.

Clark, A. H.: The revision of the Pharmacopœia will probably be entirely completed within the present year.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 191.

Remington, Joseph P.: Much greater progress has been made, considering the amount to be done, than on any previous revision. Up to this time the work has been very heavy because the comments and criticisms of the eighth revision have been used in reaching decisions.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 139.

Wiley, Harvey W.: While it is not expected that the forthcoming Pharmacopœia will be absolutely perfect or complete in scope, it will undoubtedly be the greatest aid to the pharmacist, from the scientific point of view, that has ever been put into his hands.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 4.

Remington, J. P.: The progress of the work on the revision of the United States Pharmacopœia.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 457-459; see also *J. Am. Pharm. Assoc.* 1912, v. 1, p. 1124-1128; and *Am. J. Pharm.* 1912, v. 84, p. 455.

2. SCOPE.

1. NATURE AND CONTENT OF THE PHARMACOPŒIA.

Remington, Joseph P.: The subcommittee on scope of the Pharmacopœia has practically finished its labors. The subcommittee consists of nine (six physicians, one manufacturing pharmacist, one importer of drugs, and one medical doctor, who is a pharmacognocist).—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 804.

Puckner, W. A.: Some unimportant drugs that could well be spared.—*Rep. Council Pharm. & Chem.* 1912, p. 36-37; see also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 93-99.

Lloyd, John Uri: Vegetable drugs employed by American physicians; a compilation of statistics relating to the drugs most frequently employed.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1228-1241.

Needham, R. H.: Practical suggestions on pharmacopœial revision, made with a view to calling attention to some of the needless, and in most cases worthless, drugs which have long taken up space in the U. S. P.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1345.

Beal, J. H.: Protected medicines and the Pharmacopœia. A discussion of the possibility of controlling the nature and composition

of patented products by including them in the Pharmacopœia.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1327-1329.

Remington, Joseph P.: A small active number of physicians believe that only a very limited number of drugs and preparations should be admitted to the Pharmacopœia. A larger number of the members of the Committee of Revision desire the admission of all drugs and preparations that are used to a large extent in any section of the country.—*Am. J. Pharm.* 1912, v. 84, p. 451.

Needham, R. H.: In keeping many of the criticized drugs in the U. S. P. we not only lessen the prestige of that work, but we bring criticism upon ourselves and compel students of pharmacy and materia medica to study and learn drugs, many of which they will never see, sell, nor prescribe.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1348.

Miller, Joseph L.: With a haphazard method of selecting therapeutic agents, it is not surprising that we are now burdened with a mass of drugs without remedial qualities, or at least without these powers being definitely proved.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 53.

Rusby, H. H.: The Pharmacopœia claims the authority to fix our standards, therefore upon it rests a responsibility for being correct in regard to them.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 372.

Sadtler, S. P.: A reduction in the pharmacopœia tests is recommended so that only the most important ones be retained; this would make the Pharmacopœia a much more practical volume.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 391.

Rusby, H. H.: The preface to the Pharmacopœia should contain a statement to the effect that the definitions and descriptions have the same force in requirements as the chemical and other tests.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 953.

Oldberg, Oscar: A few questions suggested by comparisons of the national pharmacopœias, with an enumeration of a number of articles described and the number of words devoted to titles in several of the foreign pharmacopœias.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 149.

Wilbert, M. I.: The scope of foreign pharmacopœias, with a table showing the number of titles included in the several national pharmacopœias, and a table showing the approximate degree of compliance with the provisions of the Brussels Conference.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 120-122.

de Waal, J. W.: Discusses the object and scope of the Pharmacopœia.—*Pharm. Weekblad*, 1912, v. 49, p. 353-361, 381-388.

2. A LIMITED MATERIA MEDICA.

Osborne, Oliver T.: The physician could succeed with a remarkably few of the present official drugs. A thorough knowledge of

the pharmacologic activities of some drugs and of the pharmacologic uselessness of other drugs is now necessary in the preparation of the medical student.—*J. Am. M. Assoc.* 1912, v. 59, p. 1160–1163; see also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 108–118.

Solis-Cohen, S.: There is no objection to any physician restricting himself to the tools that he knows how to use; but there is every objection to his attempting to restrict some other physician who has other, and perhaps better, tools and methods.—*Critic and Guide*, 1912, v. 15, p. 471.

Harding, Charles L.: The older a physician becomes the fewer remedies he is likely to employ in the treatment of acute diseases.—*Eclectic M. J.* 1912, v. 72, p. 412.

Meeker, G. H.: The intelligent criticism of a great body of scientifically trained pharmacists would undoubtedly aid in narrowing the materia medica to rational lines.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 291.

Miller, Joseph L.: While we may not be able to modify materially the *Pharmacopœia* we, as teachers of medicine, should see that the student is taught only facts and writers of textbooks in medicine should observe the same discretion in their discussion of treatment as they do in the pathology and symptomatology of diseases.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 54; see also Sollmann, Torald, p. 18.

Hare, Hobart A.: At the present time teachers are forced to teach facts which will not be used in practice merely because they will be used in State board examinations.—*J. Am. M. Assoc.* 1912, v. 59, p. 1165.

Schulman, Maximilian: A discussion of therapeutic nihilism, with an enumeration of the official drugs which no physician practicing general medicine would be willing to be deprived of.—*New York M. J.* 1912, v. 96, p. 683–685; see also editorial, p. 702.

Hynson, Henry P.: A restricted materia medica is most desirable from the point of view of the pharmacist.—*J. Am. M. Assoc.* 1912, v. 59, p. 1158; see also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 100–103.

Le Fevre, Egbert: The effect on the student who studies a large number of useless drugs is that, after graduating, he finds they are of doubtful value and immediately begins to look for those of more definite effect.—*J. Am. M. Assoc.* 1912, v. 59, p. 1159; also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 104–107.

Stewart, F. E.: It would be a great advantage to those who are teaching materia medica if they could limit the *Pharmacopœia* to really useful drugs. But unfortunately there is such a difference of opinion among therapeutists that it would be difficult to accomplish.—*J. Am. M. Assoc.* 1912, v. 59, p. 1164.

Wilbert, M. I.: The work of the committee on useful remedies.—*J. Am. M. Assoc.* 1912, v. 59, p. 1163; also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 119-122.

3. NOMENCLATURE.

Remington, Joseph P.: The subject of nomenclature has been settled by the Executive Committee on the following basis: "That changes in the titles of articles at present official be made only for the purpose of insuring greater accuracy, brevity, or safety in dispensing, and that, in the case of newly admitted articles, titles be chosen which are in harmony with general usage and convenient for prescribing."—*Am. Druggist*, 1912, v. 60, p. 372.

Oldberg, Oscar: A consistent technical pharmacopœial nomenclature is highly desirable.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 149.

Pearson, W. A.: The nomenclature of alkaloids should be retained so that the ending "ina" or "ine" should be used instead of the curtailed "in."—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 391.

Stewart, F. E.: The relation of the patent and trade-mark laws to materia medica nomenclature.—*J. Am. M. Assoc.* 1912, v. 59, p. 836-838; see also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 28-36, and *Proc. Pennsylvania Pharm. Assoc.* 1912, p. 87-95.

Hofman, J. J.: The ever increasing confusion which threatens us, not only in the official codes and in the Pharmacopœia, but also in the commercial use of names for nonofficial drugs and preparations, suggests the need for greater uniformity and the development of a definite system of nomenclature.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1130.

Editorial Note: Names which are suggestive of the disease or conditions in which the remedy is said to be indicated are objectionable.—*Pharm. J.* 1912, v. 88, p. 480.

Rusby, H. H.: The list of synonyms in the U. S. P. should be extended to include all that are in common use.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 952.

Bathurst, Charles: The introduction of synonyms in the *Ph. Brit.* has led to endless prosecutions, so that great care is needed in preparing a pharmacopœia, as to what synonyms should be introduced.—*Pharm. J.* 1912, v. 88, p. 694.

Remington, Joseph P.: The subject of synonyms has increased in importance. There is no question that the list of synonyms in the *Pharmacopœia* will have to be increased.—*Am. Druggist*, 1912, v. 60, p. 372.

Havenhill, L. D.: There is no reason why synonyms should be perpetuated by publishing them in the *Pharmacopœia*.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 862.

Anon.: A number of suggestions regarding abbreviations of U.S.P. and N. F. titles.—N. A. R. D. Notes, 1911-1912, v. 13, p. 819.

Raubenheimer, Otto.: A list of Latin, English, German, and French synonyms for various official and nonofficial articles.—J. Am. Pharm. Assoc. 1912, v. 1, p. 173-176.

Puckner, W. A.: The naming of carbon compounds. A dictionary of the prefixes, suffixes, and other syllables as well as letters and signs used in the naming of carbon compounds.—Am. J. Pharm. 1912, v. 84, p. 104-119; also Rep. Chem. Lab. Am. M. Assoc. 1912, v. 5, p. 19-55.

Puckner, W. A.: Letter of the Council on Pharmacy and Chemistry of the A. M. A. to manufacturers and dealers on the naming of medicinal products.—J. Am. Pharm. Assoc. 1912, v. 1, p. 381; also Am. J. Pharm. 1912, v. 84, p. 220-223.

Allart, Andre: The nomenclature of pharmaceutical products; a criticism of the requirements of the Council on Pharmacy and Chemistry of the A. M. A.—Eighth Internat. Cong. Appl. Chem. 1912, v. 23, p. 13-17.

4. COST AND SIZE.

Remington, Joseph P.: There is no sound reason for most of the criticism offered, and the proposition to publish the Pharmacopœia in three volumes is an unheard of thing in the history of pharmacopœias, apropos of the suggestions by L. D. Havenhill.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1222.

Jones, D.: The South Dakota Pharmaceutical Association asks formally that the Trustees of the Pharmacopœial Convention improve the quality of the binding of the Pharmacopœia so that it will at least last over night.—Proc. South Dakota Pharm. Assoc. 1912, p. 20.

Discussion of the cost of the British Pharmacopœia before the select committee.—Pharm. J. 1912, v. 88, p. 695.

5. PUBLICITY.

Meeker, George H.: While the work of the revision committee is on the whole most admirable and praiseworthy, a wrong exists that should be recognized and remedied. This wrong is that the revision committee does not deign to furnish the public and profession with anything more than fragmentary and casual reasons for the standards established.—J. Am. Pharm. Assoc. 1912, v. 1, p. 109.

Remington, Joseph P.: When the editing and the preparing of the final manuscript is completed, printing will begin and publicity will be given to whatever changes have been made in tests and standards.—Oil, Paint & Drug. Rep. 1912, v. 82, Sept. 9, p. 11.

Remington, Joseph P.: The committee believes that publicity as to changes will act as deterrent from any attempt at securing special interests. No one has intimated to the chairman, so far, any such fear, but, of course, it is natural in view of the widespread public distrust in such matters to imagine, in the language of the street, that some one has a pull.—*Am. Druggist*, 1912, v. 60, p. 275; also *Proc. Pennsylvania Pharm. Assoc.* 1912, p. 140.

Dohme, A. R. L.: The experience of the Pharmacopœia has convinced a great many pharmacists that publicity is of great value.—*Proc. N. A. M. M. P.* 1912, p. 81.

6. TIME OF PUBLICATION.

Editorial: The subject of the date of the appearance of the next revision of the Pharmacopœia is one about which there is room for speculation, and that it will increase from year to year until the book is actually on sale, no one doubts.—*Drug. Circ.*, 1912, v. 56, p. 239.

Remington, Joseph P.: The new Pharmacopœia can not possibly be delayed until every question is settled, but time is required to present the most reliable information to be had. A pharmacopœia can do no more than present the most reliable and accurate information obtainable. Fortunately the drugs of doubtful origin or identity constitute the minority.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 805.

7. DOSES.

Lloyd, John Uri: Small doses of pleasant medicines for direct action constitute the seeds of a balanced therapy sown in the early days of Eclecticism that in other fields are now not merely blossoming but in some cases even fruiting.—*Eclectic M. J.* 1912, v. 72, p. 261–263.

Thirteen of the recently published pharmacopœias include tables of maximum single and daily doses. A comparative review of these tables further emphasizes the generally recognized fact that maximum doses are at best arbitrary and suggests the thought that we have as yet little or no satisfactory basis for uniformity in dose requirements. The following list of pharmacopœias gives the date of publication and the page references to the table of maximum doses:

Ph. Ndl. IV., 1905—p. I-XXXVI.

Ph. Japon. III, 1906—p. 394–397.

Ph. Belg. III, 1906—p. 249–251.

Ph. Austr. VIII, 1906—p. 442–445.

Ph. Dan. VII, 1907—p. 417–419.

Ph. Helv. IV, 1907—p. 554–557.

Ph. Svec. IX, 1908—p. 377-378.
 Ph. Fr. V, 1908—p. 893-899.
 Ph. Serb. II, 1908—p. 284-286.
 Ph. Ital. III, 1909—p. 397-403.
 Ph. Hung. III, 1909—p. 383-386.
 Ph. Ross. V, 1910—p. 548-553.
 Ph. Germ. V, 1910—p. 608-612.

The appended table of high and low maximum doses of widely used drugs and preparations gives the number of times a given article is mentioned in the several pharmacopœias and the name of the first pharmacopœia in the order of publication giving the dose enumerated.

Table showing highest and lowest maximum single and daily doses of widely used drugs and preparations contained in foreign pharmacopœias, with the number of pharmacopœias in which each article occurs.

Name.	Number of times mentioned.	Highest maximum.			Lowest maximum.		
		Pharmacopœia.	Single dose.	Daily dose.	Pharmacopœia.	Single dose.	Daily dose.
			<i>Gm.</i>	<i>Gm.</i>		<i>Gm.</i>	<i>Gm.</i>
Acetanilidum.....	10	Ph. Ndl. IV.....	0.50	2.00	Ph. Fr. V.....	0.30	1.50
Acetphenetidinum.....	11	Ph. Dan. VII.....	1.00	4.00	Ph. Ndl. IV.....	.50	2.00
Acidum hydrocyanicum dilutum.....	5	Ph. Belg. III.....	.10	.50	Ph. Japon. III.....	.10	.30
Aconitum.....	6	Ph. Ross. VI.....	.12	.50	Ph. Belg. III.....	.10	.30
Amylis nitr̄is.....	4	Ph. Fr. V.....	.20	1.40	Ph. Ross. VI.....	.05	.30
Antimonii et potassii tart̄ras.....	12	Ph. Japon. III.....	.20	.60	Ph. Germ. V.....	.10	.30
Antipyrina.....	10	Ph. Fr. V.....	4.00	8.00	Ph. Ndl. IV.....	1.00	3.00
Apomorphinæ hydrochloridum.....	13	Ph. Japon. III.....	.02	.06	do.....	.01	.05
Aqua amygdalæ amaræ.....	12	Ph. Belg. III.....	2.00	10.00	Ph. Austr. VIII.....	1.50	5.00
Argenti nitr̄as.....	12	Ph. Austr. VIII.....	.03	.20	Ph. Dan. VII.....	.01	.04
Arseni trioxidum.....	13	do.....	.005	.020	Ph. Ndl. IV.....	.005	.010
Aspirin.....	3	Ph. Fr. V.....	1.00	6.00	Ph. Ital. III.....	1.00	5.00
Atropinæ sulphas.....	13	Ph. Japon. III.....	.001	.003	Ph. Dan. VII.....	.001	.002
Belladonnæ folia.....	10	Ph. Austr. VIII.....	.20	.60	Ph. Belg. III.....	.10	.20
Bromoformum.....	6	Ph. Ndl. IV.....	.50	1.50	Ph. Ndl. IV.....	.50	1.50
Caffeina.....	11	Ph. Fr. V.....	.50	2.00	Ph. Austr. VIII.....	.20	.60
Caffeina citrata.....	2	Ph. Helv. IV.....	1.00	3.00	Ph. Hung. III.....	.60	2.00
Caffeinæ sodio benzoas.....	6	Ph. Japon. III.....	1.00	6.00	Ph. Austr. VIII.....	.50	1.50
Cantharis.....	11	Ph. Austr. VIII.....	.05	.20	Ph. Ndl. IV.....	.025	1.00
Chloralum hydratum.....	13	Ph. Fr. V.....	4.00	12.00	do.....	2.00	4.00
Chloroformum.....	5	do.....	.50	3.00	Ph. Ross. VI.....	.50	1.00
Cocainæ hydrochloridum.....	13	Ph. Ndl. IV.....	.05	.15	Ph. Helv. IV.....	.03	.06
Codeina.....	7	Ph. Dan. VII.....	.10	.30	Ph. Ndl. IV.....	.05	.20
Codeinæ hydrochloridum.....	6	Ph. Japon. III.....	.10	.30	do.....	.05	.20
Codeinæ phosphas.....	7	Ph. Belg. III.....	.10	.30	Ph. Fr. V.....	.075	.30
Colocynt̄his.....	8	Ph. Dan. VII.....	.40	1.00	Ph. Belg. III.....	.30	1.00
Creosotum.....	12	do.....	.50	2.00	Ph. Ndl. IV.....	.20	1.00
Cupri sulphas.....	8	Ph. Japon. III.....	1.00	1.00	Ph. Austr. VIII.....	.50	.....
Diacetyl-morphine.....	2	Ph. Austr. VIII.....	.01	.05	Ph. Ross. VI.....	.01	.02
Diacetyl-morphine hydrochloride.....	5	Ph. Japon. III.....	.01	.03	Ph. Helv. IV.....	.005	.015
Digitalis.....	13	Ph. Dan. VII.....	.20	1.00	Ph. Ross. VI.....	.10	.80
Epinephrine.....	3	Ph. Belg. III.....	.002	.004	Ph. Germ. V.....	.001	.....
Ergota.....	10	Ph. Japon. III.....	1.00	5.00	Ph. Belg. III.....	1.00	3.00
Ethyl-morphine hydrochloride.....	5	Ph. Helv. IV.....	.05	.15	Ph. Germ. V.....	.03	.10
Extractum belladonnæ.....	12	Ph. Austr. VIII.....	.05	.20	Ph. Ndl. IV.....	.02	.08
Extractum cannabis indicæ.....	9	Ph. Ndl. IV.....	.10	.30	Ph. Belg. III.....	.05	.15
Extractum colocynt̄hidis.....	10	Ph. Ross. VI.....	.06	.25	Ph. Ndl. IV.....	.05	.15
Extractum hyoseyami.....	13	Ph. Dan. VII.....	.20	.80	Ph. Ross. VI.....	.06	.30
Extractum nucis vomicæ.....	13	do.....	.05	.15	Ph. Ndl. IV.....	.025	.050

Table showing highest and lowest maximum single and daily doses of widely used drugs and preparations contained in foreign pharmacopœias, with the number of pharmacopœias in which each article occurs—Continued.

Name.	Number of times mentioned.	Highest maximum.			Lowest maximum.		
		Pharmacopœia.	Single dose.	Daily dose.	Pharmacopœia.	Single dose.	Daily dose.
<i>Extractum opii</i>	12	Ph. Japon. III.....	<i>Gm.</i> 0.15	<i>Gm.</i> 0.50	Ph. Ndl. IV.....	<i>Gm.</i> 0.05	<i>Gm.</i> 0.20
<i>Fluidextractum ergotæ</i>	9	Ph. Fr. V.....	1.00	6.00	do.....	.50	2.00
<i>Fluidextractum hy-</i> <i>drastis</i>	2	Ph. Ndl. IV.....	1.00	4.00	do.....	1.00	4.00
<i>Guaiacol</i>	5	do.....	.50	2.00	Ph. Japon. III.....	.30	1.00
<i>Guaiacolis carbonas</i>	6	Ph. Hung. III.....	1.00	5.00	Ph. Fr. V.....	.50	2.00
<i>Hexamethylenamina</i>	1	Ph. Germ. V.....	1.00	3.00	do.....	.....	.....
<i>Homatropinæ hydro-</i> <i>bromidum</i>	6	Ph. Japon. III.....	.001	.003	Ph. Japon. III.....	.001	.003
<i>Hydrargyri chloridum</i> <i>corrosivum</i>	13	Ph. Austr. VIII.....	.03	.10	Ph. Dan. VII.....	.01	.03
<i>Hydrargyri chloridum</i> <i>mitæ</i>	4	Ph. Ross. VI.....	.60	1.80	Ph. Dan. VI.....	.50	1.00
<i>Hydrargyri cyanidum</i>	5	Ph. Belg. III.....	.02	.06	Ph. Germ. V.....	.01	.03
<i>Hydrargyri iodidum fla-</i> <i>vum</i>	8	Ph. Ndl. IV.....	.05	.20	Ph. Japon. III.....	.02	.06
<i>Hydrargyri iodidum ru-</i> <i>brum</i>	11	Ph. Japon. III.....	.02	.06	Ph. Ndl. IV.....	.015	.050
<i>Hydrargyri oxidum fla-</i> <i>vum</i>	10	Ph. Austr. VIII.....	.03	.10	Ph. Japon. III.....	.02	.06
<i>Hydrargyri oxidum ru-</i> <i>brum</i>	4	Ph. Helv. IV.....	.02	.10	do.....	.02	.06
<i>Hydrargyri salicylas</i>	6	Ph. Japon. III.....	.02	.06	Ph. Ross. VI.....	.015	.060
<i>Hydrastina</i>	1	Ph. Fr. V.....	.10	.30	do.....	.....	.....
<i>Hyoscyamus</i>	10	Ph. Germ. V.....	.40	1.20	Ph. Fr. V.....	.20	.60
<i>Iodoformum</i>	11	Ph. Austr. VIII.....	.20	1.00	Ph. Ross. VI.....	.10	.60
<i>Iodum</i>	10	do.....	.03	.10	do.....	.01	.05
<i>Liquor potassii arsenitis</i>	13	do.....	.50	2.00	do.....	.20	1.00
<i>Lobelia</i>	3	Ph. Germ. V.....	.10	.30	Ph. Germ. V.....	.10	.30
<i>Methylis salicylas</i>	1	Ph. Japon. III.....	2.00	6.00	do.....	.....	.....
<i>Morphinæ hydrochlori-</i> <i>dum</i>	13	do.....	.03	.10	Ph. Fr. V.....	.02	.08
<i>Morphinæ sulphas</i>	1	do.....	.03	.10	do.....	.....	.....
<i>Nux vomica</i>	12	Ph. Belg. III.....	.20	.60	Ph. Japon. III.....	.10	.20
<i>Oleoresina aspidii</i>	6	Ph. Dan. VII.....	15.00	15.00	Ph. Ndl. IV.....	8.0	8.0
<i>Oleum tiglii</i>	13	Ph. Germ. V.....	.05	.15	do.....	.05	.10
<i>Opil pulvis</i>	13	Ph. Fr. V.....	.20	.60	do.....	.10	.40
<i>Paraldehydum</i>	7	Ph. Japon. III.....	5.00	10.00	Ph. Ross. VI.....	3.00	8.00
<i>Phenol</i>	11	Ph. Austr. VIII.....	.10	.50	do.....	.03	.20
<i>Phenylis salicylas</i>	6	do.....	2.00	6.00	Ph. Hung. III.....	1.50	5.00
<i>Phosphorus</i>	13	do.....	.001	.005	Ph. Germ. V.....	.001	.003
<i>Physostigminæ salicy-</i> <i>las</i>	11	Ph. Germ. V.....	.001	.003	do.....	.001	.003
<i>Physostigminæ sulphas</i>	2	Ph. Ndl. IV.....	.001	.003	Ph. Ndl. IV.....	.001	.003
<i>Pilocarpinæ hydrochlori-</i> <i>dum</i>	13	Ph. Serb. II.....	.03	.06	Ph. Helv. IV.....	.02	.04
<i>Plumbi acetat</i>	13	Ph. Austr. VIII.....	.10	.50	Ph. Ital. III.....	.05	.25
<i>Pulvis ipecacuanhæ et</i> <i>opii</i>	9	Ph. Dan. VII.....	1.50	6.00	Ph. Ross. VI.....	1.00	3.75
<i>Resina jalapæ</i>	4	Ph. Japon. III.....	1.00	3.00	do.....	.15	.50
<i>Resina podophylli</i>	11	do.....	.10	.30	Ph. Austr. VIII.....	.05	.20
<i>Resorcinol</i>	8	Ph. Fr. V.....	1.25	5.00	Ph. Helv. IV.....	.50	1.50
<i>Santonium</i>	13	Ph. Ross. VI.....	.10	.40	Ph. Ndl. IV.....	.10	.30
<i>Scilla</i>	4	Ph. Helv. IV.....	.50	1.50	Ph. Belg. III.....	.20	.60
<i>Scopolaminæ Hydro-</i> <i>bromidum</i>	6	Ph. Dan. VII.....	.0005	.0020	Ph. Ndl. IV.....	.0005	.0010
<i>Sodii arsenas</i>	4	Ph. Belg. III.....	.010	.030	do.....	.005	.010
<i>Sodii arsenilas</i>	1	Ph. Germ. V.....	.20	.....	do.....	.....	.....
<i>Sodii cacodylas</i>	3	Ph. Fr. V.....	.20	.20	Ph. Helv. IV.....	.05	.15
<i>Sodii nitris</i>	2	Ph. Germ. V.....	.30	1.00	do.....	.10	.30
<i>Sparteina sulphas</i>	2	Ph. Helv. IV.....	.20	.60	Ph. Fr. V.....	.05	.25
<i>Stramonium</i>	6	Ph. Austr. VIII.....	.30	1.00	Ph. Ital. III.....	.20	.50
<i>Strophanthinum</i>	1	Ph. Fr. V.....	.0003	.0010	do.....	.....	.....
<i>Strychninæ mitras</i>	12	Ph. Austr. VIII.....	.01	.02	Ph. Ross. VI.....	.003	.010
<i>Strychninæ sulphas</i>	1	Ph. Fr. V.....	.006	.018	do.....	.....	.....
<i>Sulphonethylmetha-</i> <i>num</i>	10	Ph. Japon. III.....	2.00	4.00	Ph. Ndl. IV.....	2.00	2.00
<i>Sulphonmethanum</i>	13	Ph. Ross. VI.....	2.00	6.00	do.....	2.00	2.00
<i>Theobromina</i>	2	Ph. Fr. V.....	1.00	4.00	Ph. Helv. IV.....	.50	3.00
<i>Theobrominæ sodium</i> <i>salicylate</i>	10	Ph. Hung. III.....	1.00	8.00	Ph. Belg. III.....	1.00	3.00
<i>Tinctura aconiti</i>	7	Ph. Germ. V.....	.50	1.50	do.....	.40	1.00

Table showing highest and lowest maximum single and daily doses of widely used drugs and preparations contained in foreign pharmacopœias, with the number of pharmacopœias in which each article occurs—Continued.

Name.	Number of times mentioned.	Highest maximum.			Lowest maximum.		
		Pharmacopœia.	Single dose.	Daily dose.	Pharmacopœia.	Single dose.	Daily dose.
<i>Tinctura belladonnæ</i>	9	Ph. Austr. VIII...	Gm. 1.00	Gm. 4.00	Ph. Belg. III.....	Gm. 0.40	Gm. 1.00
<i>Tinctura cannabis indicæ</i>	4	Ph. Ross. VI.....	1.25	3.75	Ph. Helv. IV.....	1.00	3.00
<i>Tinctura cantharidis</i>	12	Ph. Japon. III.....	.50	1.50	Ph. Ndl. IV.....	.20	.60
<i>Tinctura colchici seminis</i>	12	do.....	2.00	6.00	do.....	1.00	3.00
<i>Tinctura digitalis</i>	13	Ph. Dan. VII.....	2.00	10.00	Ph. Ross. VI.....	.90	2.70
<i>Tinctura hyoseyami</i>	2	Ph. Belg. III.....	1.20	3.00	Ph. Fr. V.....	1.00	4.00
<i>Tinctura iodi</i>	11	Ph. Austr. VIII.....	.30	1.00	Ph. Ndl. IV.....	.15	.60
<i>Tinctura lobeliæ</i>	12	Ph. Ndl. IV.....	2.00	5.00	Ph. Japon. III.....	1.00	3.00
<i>Tinctura nucis vomicæ</i>	13	do.....	2.50	5.00	Ph. Dan. VII.....	.50	2.00
<i>Tinctura opii</i>	13	Ph. Fr. V.....	2.00	6.00	Ph. Ross. VI.....	.60	2.50
<i>Tinctura opii crocata</i>	11	do.....	2.00	6.00	do.....	.60	2.50
<i>Tinctura scillæ</i>	4	Ph. Belg. III.....	2.00	6.00	Ph. Fr. V.....	1.50	5.00
<i>Tinctura strophanthi</i>	13	Ph. Ndl. IV.....	.50	2.00	Ph. Dan. VII.....	.25	1.00
<i>Veratrina</i>	10	Ph. Austr. VIII.....	.005	.020	Ph. Fr. V.....	.002	.010
<i>Verol</i>	4	Ph. Helv. IV.....	1.00	2.00	Ph. Germ. V.....	.75	1.50
<i>Zinci sulphas</i>	8	Ph. Japon. III.....	1.00	1.00	Ph. Ross. VI.....	.50	.50

8. ANTIDOTES.

Wilbert and Motter: Antidotes are, by statute in 13 States, required on the label.—P. H. Bull. No. 56, 1912, p. 20-27.

Hower and Barman: The enforcement of the poison law is lax, owing to its being under local police jurisdiction, and it is, therefore, recommended that the enforcement of the poison law be placed with some competent State department.—Rep. Ohio D. & F. Com. 1912, 1913, p. 22.

9. WEIGHTS AND MEASURES.

Sicherman, H.: A plea for the use of the metric system in prescription writing.—N. York M. J. 1912, v. 95, p. 643.

Editorial: Valuable as is the metric system for laboratory use and strictly scientific calculations, we fear we are yet far from its universal adoption.—N. York M. J. 1912, v. 96, p. 1080.

Diekman, Geo. C.: Report of the committee on weights and measures. During the year much has been accomplished in the matter of popularizing the metric system of weights and measures.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1426-1428.

Anon.: The Republic of Venezuela has adopted the metric as the official system of weights and measures, and has made its use obligatory in the courts and other public offices.—Chem. & Drug. 1912, v. 81, p. 108.

Johnston-Lavis, H. J.: One of the principal reasons for which English investigators are not quoted and credited by foreign workers is that the latter can not afford the time and patience to master

our ridiculously complicated so-called "standard weights and measures."—*Brit. M. J.* 1912, v. 2, p. 527.

Editorial: There is much to be said in favor of the word "mil." It looks and sounds better than "cc." and consumes much less time and space in the writing than "cubic centimeter," so why not make it official?—*Drug. Circ.* 1912, v. 56, p. 653.

Thorp, B. S.: Not one of 36 graduates examined was correct. Some were better than others, but all were bad. On one the 6-ounce mark was correct, all the remaining graduates were wrong.—*Am. J. Pharm.* 1912, v. 84, p. 382; also Editorial, *Am. Druggist*, 1912, v. 60, p. 420.

Tilford, J. Floyd: Of 3,761 graduates examined, 154 were condemned.—*Rep. Kansas Bd. Health*, 1912, p. 115.

England, Joseph W.: Weights and measures should be guaranteed U. S. P. standard.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 818; also *Proc. Pennsylvania Pharm. Assoc.* 1912, p. 118-120.

Anon.: The official [German] limitations for the permissible variations in weights and measures.—*Apoth.-Ztg.* 1912, v. 27, p. 13-14.

Meeker, G. H.: The statement on p. LIV of the U. S. P. VIII as to the standard meter is not strictly accurate.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 25.

Woods, Chas. D.: Reduction of one system of weights and measures to another should not ordinarily be attempted.—*Proc. Maine Pharm. Assoc.* 1912, p. 44; see also Cook, Alfred N., *Rep. South Dakota F. & D. Com.* 1912, p. 75.

Cook, Alfred N.: Every druggist should provide himself with a set of metric weights and cylindrical graduates.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 26.

Tilford, J. Floyd: Of 718 prescription scales examined, 195 were condemned. Of 11,478 prescription weights examined, 5,362 were condemned.—*Rep. Kansas Bd. Health*, 1912, p. 115.

Apple, Franklin M.: The hypodermic tablet case has proven of great value when weighing out small portions of potent drugs, giving conveniently a degree of accuracy that is difficult to get in weighing the drugs themselves.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1254.

Lenz, W.: An illustrated description of apparatus for determining the weight of minute quantities.—*Apoth.-Ztg.* 1912, v. 27, p. 189-192, 200-202, 209-210; also *Arb. pharm. Inst. Univ. Berl.* 1911, 1912, p. 175-190.

10. OBJECTS AND USES.

Remington, J. P.: Historical sketch of the U. S. P.—*Pharm. Era*, 1912, v. 45, p. 97-100.

Wiley, Harvey W.: The people of this country are beginning to look upon the pharmacist as a man of learning and one devoted to his duties. They will soon appreciate the fact that the only safe place to get a real remedy is at the near-by drug store.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 4.

Hall, Wm. A.: A review of the efforts made in Detroit to popularize the U. S. P. and National Formulary.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 47.

Goodman, E.: Physicians no longer care for pharmacopœial remedies, or the Pharmacopœia, so that physicians and pharmacists have grown apart, and the Pharmacopœia along old-time lines is no longer sufficient for druggists and physicians.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 294.

Varnum, Walter H.: Owing to a large number of unethical proprietors, the use of the Pharmacopœia is growing less every day.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1242.

Hower and Barman: Most preparations taken up as samples from the dealers show a lack of familiarity with the most common formulas of the U. S. P. A closer observance of the details of manufacture would overcome these defects.—*Rep. Ohio D. & F. Com.* 1912, 1913, p. 22.

Ford, Charles M.: If all the sins that might be enumerated against a retail druggist were formed into a perfect arch, the keystone of that arch would be supplied by the druggist who has neither a Pharmacopœia or a National Formulary in his store.—*Proc. Nebraska Pharm. Assoc.* 1912, p. 108.

Carmichael, T. H.: New and Nonofficial Remedies, the National Formulary, and the United States Pharmacopœia are to make a trio which is supposed to contain all the preparations of the *materia medica*, either simple or compound, which may be employed to secure legitimate therapeutic results.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 497.

Editorial Note: The scheme, proposed by Hynson, for books having to do with drug standards, is a recognition of the fact that the two present standards, the Pharmacopœia and the National Formulary, do not fill the practical requirements of practicing physicians, teachers and examining boards.—*J. Am. M. Assoc.* 1912, v. 59, p. 291.

11. ADDITIONS AND DELETIONS.

Remington, J. P.: Entirely too much stress has been laid upon the question of admissions and deletions. Physicians will continue to prescribe unofficial substances as they always have.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1125.

Mollet, C. E.: No subject or substance should be dropped from the Pharmacopœia so long as it is on the markets of the United States.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1349.

Miller, Joseph L.: There is about the questionable drugs which crowd our Pharmacopœia nothing sacred that should prevent our carefully working them over experimentally, and, when essential, clinically, to determine their real value.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 54.

Lloyd, John Uri: The pharmacopœial committee is confronted in drug selection with a perplexing problem. Whatever may be their action, criticism is certain in some directions because of remedies included, while in other directions certain of the remedies excluded will be made subjects of adverse comment.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1241.

Diekman, George C.: There is considerable dissatisfaction in many parts of the country, among pharmacists and others especially, concerning the large number of articles to be deleted. Some of the articles which it was proposed to add have little if any merit and will only serve to encumber the pages of the Pharmacopœia.—*Proc. New York Pharm. Assoc.* 1912, p. 101.

Remington, J. P.: When the Pharmacopœia defines an article, it is necessary to give the ingredients which go to make up that article, else how would the pharmacist know when it is pure?—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1348.

12. PURITY AND STRENGTH.

Meeker, George H.: The knowledge of the profession concerning the "purity rubric" is lamentably vague; and is practically confined to the dogmatic provisions of the main body of the Pharmacopœia, as inadequately elucidated by the preface and introduction to the work.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 110.

Smith, Carl E.: The wording of the official requirements should be such that no doubt may be felt as to their exact meaning. At the present time too much is left to the discretion of the analyst.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 208.

Schneider, Albert: The purity rubric of the U. S. P. is far from satisfactory, and the official methods of drug assay and testing must be modified and improved.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1200.

Bernegau and E'Ve: "Unweighable residue" should be defined. In the German Pharmacopœia it is defined as "less than 1 mgm."—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 124.

Raubenheimer, Otto: We need official methods of testing various preparations, as, for instance, solution of citrate of magnesium.—*Proc. New York Pharm. Assoc.* 1912, p. 137.

Bernegau and E'Ve: A few suggestions for the ninth decennial revision of the United States Pharmacopœia, based on difficulties met by the authors in following the pharmacopœial instructions for the testing of official products.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 123-127.

Meade, H. B.: The grade of chemicals ordinarily supplied to the trade is of such high quality that the requirements of the Pharmacopœia are generally exceeded; in many instances therefore, assays are rather unnecessary.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 275.

Hower and Barman: All samples obtained from vendors and peddlers have been found deficient in strength and adulterated.—*Rep. Ohio. D. & F. Com.* 1912, 1913, p. 22.

Puckner, W. A.: Drugs which are widely used and open to free competition are found to be of a very acceptable degree of purity and of a relatively low price; that is, the high quality of these substances has been found practicable without any great increase in cost.—*J. Am. M. Assoc.* 1912, v. 59, p. 1156.

Kebler, L. F.: The quality of drugs on the market.—*J. Am. M. Assoc.* 1912, v. 59, p. 1604-1606.

Kraemer, Henry: The retail pharmacist as a purveyor of pure drugs.—*J. Am. M. Assoc.* 1912, v. 59, p. 1599-1603.

Editorial: As the laws now stand there is no adequate supervision of the quality of the drugs sold to physicians for their own dispensing.—*N. York M. J.* 1912, v. 96, p. 81.

Editorial: All the complaint of the quality of the drugs employed by the dispensing doctor comes from the druggist, none from the doctors. The latter seem well pleased with the self-dispensed remedies and so do the patients.—*Am. J. Clin. Med.* 1912, v. 19, p. 1167.

13. ATOMIC WEIGHTS.

Kellar, O.: The atomic theory.—*D.-A. Apoth.-Ztg.* 1912, v. 33, p. 113-114, 138-139.

Hull, Albert W.: Experimental evidence concerning the structure of the atom.—*Sc. Am. Suppl.* 1912, v. 73, p. 386-387.

Aston, F. W.: Weighing the atom. A review, with illustrations, of Thomson's new method of chemical analysis.—*Sc. Am. Suppl.* 1912, v. 74, p. 268-271.

Richards, Theodore W.: Atomic weights; a general discussion of the problems involved.—*J. Am. Chem. Soc.* 1912, v. 34, p. 959-971.

Hinrichs, G. D.: Note on the systematic errors in the chemical operations undertaken for the determination of atomic weights.—*Compt. rend. Acad. sc.* 1912, v. 154, p. 1227.

Le Chatelier, Henry: The determination of atomic weights after the method of Gustavus Hinrichs.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 110.

Meeker, G. H.: It is believed that a table based upon oxygen=16 would be much more convenient than the present table in the Pharmacopœia, and that the Pharmacopœia should further declare that the official table of atomic weights shall be the last revised, issued by the International Committee on Atomic Weights.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 27.

Merkel, E.: Suggestions for uniformity in use of atomic weight tables.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 25, p. 91-93; for discussion see vol. 28, p. 26.

Clarke, F. W.: As an amendment or substitute for a previous motion offers: "That it is the desire of this congress that the international table for 1912, which is already extant, shall be regarded for commercial purposes as the official table until the next congress convenes."—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 28, p. 216; see also *D.-A. Apoth. Ztg.* 1912, v. 33, p. 116, and *Chem. & Drug.* 1912, v. 81, p. 515.

Kindsher, E.: A review of the atomic weight researches for 1911.—*Fortschr. Chem.* 1912, v. 5, p. 1-8.

Clarke, F. W.: The report of the International Committee on Atomic Weights for the year 1912, and the atomic weight table for the same period.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 1-5; see also *J. Am. Soc.* 1912, v. 34, p. 225-232.

Clarke, F. W.: Annual report of the International Committee on Atomic Weights, 1913, with the international atomic weight table for 1913.—*J. Am. Chem. Soc.* 1912, v. 34, p. 1437-1440; also *J. Chem. Soc. Lond.* 1912, v. 101, p. 1829-1832; *Ztschr. anorg. Chem.* 1912, v. 79, p. 277-280 and *Ztschr. ang. Chem.* 1912, v. 25, p. 2527-2528.

14. CHEMICAL FORMULAS.

Rusby, H. H.: It should be definitely stated that a chemical formula following a title is in the nature of a definition of that article.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 951.

Havenhill, L. D.: While structural formulas may be out of place in the U. S. P., this should not be so interpreted as to eliminate the constitutional formulas now used. Empirical formulas for organic chemicals are of but little value.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 862.

Schamelhout, A.: The table of chemical formulæ in the supplement to the *Ph. Belg.* III might be suppressed, and the formulæ indicated in the text under each article.—*Bull. Soc. roy. Pharm. Bruxelles*, 1912, v. 56, p. 269.

3. NONPHARMACOPŒIAL STANDARDS.

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Abbott, J. S.: If a manufacturer is allowed by law, as he is allowed by national law, to change the composition of the U. S. P. preparations at pleasure, the physician never knows what quantity of a drug or drugs he is prescribing.—*Rep. Texas F. & D. Com.* 1912, p. 21.

Ladd, E. F.: Druggists should take no preparations that are not guaranteed as standard, to conform with the requirements of the U. S. P.—*North Dakota Pharm. Assoc.* 1912, p. 71.

4. REQUIREMENTS.

Mann, E. W.: A table showing suggested standards, ranges of specific gravity, and other requirements for galenical preparations.—*Am. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 45–51.

Knapp, Th.: The dry residue and the specific gravity of a number of Ph. Helv. IV tinctures.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 676–678.

Crumbine, S. J.: The need for drug control is quite apparent, for if medicines are necessary at all in the cure or mitigation of disease in man or animal, it is self-evident that those medicines should be of known quality or strength, if the prescriber or attending physician is to count on the results.—*Am. Food J.* 1912, v. 7, July, p. 28.

Ladd, E. F.: In the manufacture of some of the U. S. P. preparations on the market it would seem doubtful as to whether or not a competent registered pharmacist or chemist has made an analysis or assay as to the strength of the preparation. It is, therefore, necessary that the manufacturers and jobbers be held to a stricter account.—*Northwestern Drug.* 1912, v. 13, Aug., p. 63.

5. GALENICALS.

Ax, F.: The making of galenical preparations in the laboratory of the pharmacy, with a plea for the introduction of cooperative manufacture and control.—*Pharm. Ztg.* 1912, v. 57, p. 1042-1043.

Varnum, Walter H.: Pharmacists have largely changed, from the old and established methods of making U. S. P. preparations from the crude drug by percolation or maceration, to the new and time-saving plan of using the fluid extract as a base for tinctures, spirits, infusions, sirups, etc.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1242.

Noyes, C. Reinold: Solution of ferric chloride, spirit of ammonia, and distilled water are made far more economically on a large scale where different processes from those of the U. S. P. are used and purer products secured—*Proc. South Dakota Pharm. Assoc.* 1912, p. 43.

Mayo, Frederick W.: Every pharmacist ought to make it his business to manufacture every preparation he possibly can.—*N. A. R. D. Notes*, 1912, v. 14, p. 70.

Blair, Henry C.: The pharmacist should manufacture all galenicals, unless they can be procured of a better quality than he can make or unless they can be purchased for a less price than they cost to make, quality being equal.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 17.

Mahr, J. C.: It is evident that a degree of carelessness on the part of pharmacists in compounding their own preparations exists to a dangerous extent.—*Rep. Oklahoma P. H. Dept.* 1912, p. 407.

Caspari, Charles, jr.: Retail pharmacists, taking them as a whole, will be better off in buying their preparations—that is, buying a reliable preparation from a large manufacturer—than in trying to make them.—*Am. Food J.* 1912, v. 7, p. 31.

Hale, Worth: Galenical preparations on the market vary widely regardless of the reputation of the manufacturer.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 87.

Rusby, H. H.: A recent innovation in connection with galenical preparations is the marketing of preparations of certain potent

drugs in original packages physiologically tested and dated, so as to insure against possible deterioration.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 956.

Kunze: Report of the examination of a number of galenicals, giving specific gravity, extract content, ash and alkaloid content of the several preparations.—*Apoth. Ztg.* 1912, v. 27, p. 105-106.

Goodall, Alexander: The potency and keeping properties of some galenicals, as determined by physiological tests.—*Pharm. J.* 1912, v. 89, p. 130.

Goodall, Alexander: The outstanding point which it is desired to emphasize is the very real danger which may arise from tinctures of excessive potency. The practical point insisted upon is that only recently prepared tinctures which have been tested should be dispensed.—*Chem. & Drug.* 1912, v. 81, p. 206.

6. DECOMPOSITION.

Ladd, E. F.: Do not keep old, stale stock; it had better be thrown out than to take chances with it.—*North Dakota Pharm. Assoc.* 1912, p. 78.

Thrush, M. Clayton: Detailed investigation of certain galencial preparations of the U. S. P., with special reference to their stability.—*Pharm. Era*, 1912, v. 45, p. 750-753. See also editorial p. 749.

Ciamician and Silber: The chemical action of light, auto-oxydation.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 38-43, 1540-1546, 1842-1845.

Neuberg and Schewket: On the changes in medicaments produced by light. Solutions of the articles examined undergo marked change and from otherwise indifferent materials, physiologically active substances like aldehydes, ketone acids, etc., may be generated. Active medicaments should be kept, so far as applicable in solid form, protected from light, and solutions should be made only as required. (*Biochem. Ztschr.* 44, No. 5 and 6.)—*Pharm. Ztg.* 1912, v. 57, p. 778.

Vanderkleed, Chas. E.: Light seems to be the least important feature in the deterioration of fluid extract of ergot.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 137.

Hynson: Hermetically sealed containers for drugs and preparations will no doubt constitute the coming method for preserving them.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 136.

Caspari, Charles, jr.: There is undoubtedly as much in knowing how a drug store ought to be kept as there is in making the preparations.—*Am. Food J.* 1912, v. 7, July, p. 31.

Johnson, J. W.: Until the retail druggists of the State take more precautions in regard to the preservation of their products, we can not expect to have a line of standard preparations on the Oklahoma market.—*Rep. Oklahoma P. H. Dept.* 1912, p. 415.

DETERIORATION.

Mahr, J. C.: An abnormal amount of old, deteriorated official preparations were taken from drug stocks of the State.—Rep. Oklahoma P. H. Dept. 1912, p. 406.

Ladd, E. F.: Druggists permit old stock to accumulate until some of the drugs which they have on hand have so deteriorated that they are practically useless for the purposes for which they were intended to be used.—North Dakota Pharm. Assoc. 1912, p. 72.

Cook, Alfred N.: A stock of drugs needs very careful watching, which only a trained pharmacist is able to give. Experience has demonstrated the fact that even in many drug stores of the State much deterioration has taken place and many of the drugs that have been sold in the past have been worthless.—Proc. South Dakota Pharm. Assoc. 1912, p. 29.

Anon.: The investigations of Hale on digitalis, of Edmunds and Hale on ergot and of Dohme on calabar bean, coca, and aconite have revealed the facts that many drug preparations deteriorate, and that drugs are often several years old when they reach the patient.—Am. J. Pharm. 1912, v. 84, p. 566.

Editorial: Neuberg has called attention to the remarkable fact that nearly all types of organic compounds acquire a pronounced photosensitiveness when they are mixed with certain inorganic compounds. Organic pharmaceutical preparations containing metallic components should be preserved, if possible, in dry form rather than in solution; in any event they should be kept in dark containers and protected against light, and the preparation of fresh solutions encouraged as far as possible.—J. Am. M. Assoc. 1912, v. 59, p. 2160.

Langer, Hans: On the stability of scopolamine solutions in ampoules. A comparatively rapid deterioration of this drug in solution, even when preserved in hermetically sealed ampoules, is noted. Scopolamine solutions should be freshly prepared, and their preservation for any length of time even in sterile ampoules is to be avoided.—Therap. Monatsh. 1912, v. 26, p. 121-124.

7. INCOMPATIBILITY.

Queregh and Cavagnari: On the nature of pharmaceutical incompatibility.—Boll. chim. farm. 1912, v. 51, p. 705-706.

Salvart, A.: Pharmaceutical incompatibility, hypodermic solutions containing phosphate or glycerophosphate of soda, sodium cacodylate and strychnine sulphate.—Bull. Soc. pharm. Bordeaux, 1912, v. 52, p. 545-549.

Editorial: Note on some curious cases of incompatibility reported in a recent American pharmaceutical journal.—Lancet, 1912, v. 182, p. 597.

Ritchie, D. F.: Brief note on the incompatibility of sodium acid phosphate and urotropine.—*Pharm. J.* 1912, v. 89, p. 478. See also p. 511.

Griggi, G.: General incompatibility of sera and various solutions.—*Boll. chim. farm.* 1912, v. 51, p. 697-704.

S. PERCOLATION.

Watson, G. N.: The most difficult thing to impress upon a student's mind, in the manufacture of pharmaceuticals, is the importance of strict adherence to all details connected with the process of percolation. An analysis of preparations purchased by drug inspectors throughout the State shows that carelessness as regards this method of extraction is not confined to students.—*Proc. Kansas Pharm. Assoc.* 1912, p. 86.

Nagel, Oskar: An illustrated report on some lixiviation experiments.—*Chem. Ztg.* 1912, v. 36, p. 780-781.

9. EXTRACTION.

Richter, R.: In the Ph. Germ. V the practice of making tinctures by maceration has been retained, much to the surprise of German pharmacists who have repeatedly pointed out that percolation gives results that are more generally satisfactory than does maceration.—*Pharm. Zentrallh.* 1912, v. 53, p. 1943-1946.

Anon.: The production of tinctures according to the Ph. Germ. V.—*Pharm. Ztg.* 1912, v. 57, p. 521.

Jaiser, Adolf: The reported results for specific gravity and extract content of a number of Ph. Germ. V fluid extracts and suggestions as to average requirements for fluid extracts.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 223.

Monti, E.: French Patent 431,619, September 16, 1910, covers a process and apparatus for purifying, clarifying, maturing, and ageing vegetable extracts.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 39.

Haycock, J.: Concentrated tinctures, with characters of some 63 preparations.—*Pharm. J.* 1912, v. 89, p. 141. For discussion see p. 177, 262. See also *Year-Book of Pharmacy*, 1912, p. 535-543.

10. STERILIZATION.

Cook, E. Fullerton: Sterilization in the pharmacy; equipment, methods, and application.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 74-77.

Massobino, Carlo: The sterilization of hypodermic solutions by mechanical, chemical, and physical means; dry heat—steam.—*Boll. chim. farm.* 1912, v. 51, p. 2-8.

Kühl, H.: The sterilization of solutions in pharmacy.—*Pharm. Zentrallh.* 1912, v. 53, p. 763-764.

Schneider, Albert: A chapter on pharmaceutical bacteriology discusses the subject of sterilization.—*Merek's Rep.* 1912, v. 21, p. 94-98.

Book review: Bacteriology and sterilization in the pharmacy, by Stich and Wulff.—*Ber. pharm. Gesellsch.* 1912, v. 22, p. 114-116. See also *Pharm. Zentrallh.* 1912, v. 53, p. 125.

Gathercoal, E. N.: A book review of "Pharmaceutical bacteriology with special reference to disinfection and sterilization," by Albert Schneider.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1192-1193. See also *Am. J. Pharm.* 1912, v. 84, p. 144.

Lascoff, J. Leon: The sterilization of bottles and other apparatus by means of formaldehyde gas.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 728-729.

Forek, P.: Bacteriological observations in connection with aqueous solutions of organic materials, and the need for care in connection with sterilization in pharmacy.—*Apoth.-Ztg.* 1912, v. 27, p. 1022-1023.

Anon.: An illustrated description of a steam sterilizer, according to the suggestions by Krämer.—*Apoth.-Ztg.* 1912, v. 27, p. 225.

Baroni, E.: New apparatus for sterilizing fatty substances.—*Boll. chim. farm.* 1912, v. 51, p. 73-77.

Manning, William J.: A method of continuous sterilization of instruments, together with aseptic hypodermic medication.—*J. Am. M. Assoc.* 1912, v. 58, p. 1939.

Latapie, A.: Brief illustrated description of a new instrument sterilizer for use in the laboratory.—*Compt. rend. Soc. Biol.* 1912, v. 73, p. 700.

Grimbert, L.: The sterilization of surgical dressings.—*J. pharm. et chim.* 1912, v. 6, p. 5-13.

Hall, J. O.: Some scattering remarks on the subject of sterilization and the general methods in use among dental surgeons for sterilizing instruments.—*Dental Digest*, 1912, v. 18, p. 172-174.

11. FORMS OF ADMINISTRATION.

Fantus, Bernard: Candy medication; a form designed more particularly for the administration of medicines to children.—*Tr. Am. M. Ass. Sec. Pharm. & Therap.* 1912, p. 64-69. Also *J. Am. M. Assoc.* 1912, v. 59, p. 842-844.

Anon.: An illustrated description of a machine for preparing powders in paper.—*Am. Pharm. Louvain*, 1912, v. 18, p. 486-487.

Dills, J. C.: Brief note on the method of insuring accuracy of tablet triturates.—*Drug. Circ.* 1912, v. 56, p. 450.

Carnot and Nedley: For the administration of soluble medicaments by the stomach, preference should be given their isotonic solu-

tions (Bull. Soc. Pharm. Bordeaux).—*J. pharm. Anvers*, 1912, v. 68, p. 691.

Fearn: In hypodermatic medication the thing of importance is to be sure of the purity of the drug.—*Eclectic M. J.* 1912, v. 72, p. 100-101.

AMPOULES.

Utech, P. Henry: Ampoules, although introduced into France more than 30 years ago, are only now being used in this country. They embody an ideal method of preserving, storing, and transporting small quantities of medicines which require sterilization before administering.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 956.

Grübler, M.: Practical directions and experiences in the production of sterile solutions in ampoules.—*Pharm. Post*, 1912, v. 45, p. 454.

Reddé, H.: An illustrated description of an apparatus to facilitate the filling of ampoules.—*J. pharm. et chim.* 1912, v. 5, p. 396-398.

Ranwez, F.: An apparatus for the cleaning, automatic filling, and sterilization of ampoules.—*Ann. Pharm. Louvain*, 1912, v. 18, p. 544-545.

Keseling: Description, with illustrations, of a perfected apparatus for the filling and sterilization of ampoules.—*Pharm. Zentralh.* 1912, v. 53, p. 25-26. See also p. 758; and *Apoth.-Ztg.* 1912, v. 27, p. 203.

Linckersdorff: Some recent literature on the making and filling of ampoules.—*Pharm. Ztg.* 1912, v. 57, p. 959.

Greeley, James T.: A new device (collapsible tube) for hypodermic medication; illustrated.—*J. Am. M. Assoc.* 1912, v. 58, p. 779.

CACHETS.

Anon.: The chapter in practical pharmacy deals with cachets.—*Pharm. J.* 1912, v. 89, p. 45.

Apple, Franklin M.: Chocolate cachets, made by filling out "Ceylon wafers" and subsequently sealing the edges with heated chocolate sirup or with mucilage of acacia.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 150.

CAPSULES.

Anon.: Chapters in practical pharmacy dealing with gelatin capsules and apt figures of apparatus used in preparation.—*Pharm. J.* 1912, v. 88, p. 642-644, 778.

Apple, Franklin M.: If the tops of soft capsules in which oils are dispensed be wiped off with pellets of cotton moist with chloroform, avoiding excess of the latter, the proper sealing of the capsules is assured.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1253.

Anon.: Illustrated description of a new style of powder paper or "powder capsule."—*Pharm. Zentralh.* 1912, v. 53, p. 515.

COMPRESSED TABLETS.

Blair, Henry C.: Compressed tablets can readily be made extemporaneously by the use of a hand machine, and while the expense in time may be greater than the cost of a ready made tablet, the freshness of the medicine and the softness of the tablet will be sufficient to warrant the proceeding.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 18.

Hoyer, Jos.: The production of compressed tablets in the pharmacy.—*Pharm. Post*, 1912, v. 45, p. 13-15, 41-42, 63-64, 110-112, 129. See also *Pharm. Ztg.* 1912, v. 57, p. 114-116.

Fantus, Bernard: A formula with directions for making candy tablets as a vehicle for medicines designed more particularly for children.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 66.

SUPPOSITORIES.

Xrayser II.: Suppositories were known to Hippocrates. It is rather curious, considering the length of time in which they have figured in practice, that they do not appear in any of our old pharmacopœias, whether of London, Edinburgh, or Dublin, though they are included in several of our dispensatories.—*Chem. & Drug.* 1912, v. 81, p. 439.

van Riel, jr., and van der Wielen: The making of suppositories, bacilli, and ovules with cacao butter and wax, and the melting point of mixtures of cacao butter and wax.—*Apoth.-Ztg.* 1912, v. 27, p. 539.

Anon.: The chapters in practical pharmacy deal with the making of suppositories, with illustrations of several forms of molds.—*Pharm. J.* 1912, v. 89, p. 342, 708.

Vanderkleed and Neidberg: Determination of glycerine suppositories.—*Apothecary*, 1912, v. 24, Aug. p. 31.

12. METHODS OF ADMINISTRATION.

Maurel, E.: Influence of the route of administration on minimal lethal dose and therapeutic dose of barium chloride.—*Compt. rend. Soc. Biol.* 1912, v. 72, p. 250, 299, 360. See also p. 396.

Sollmann, Torald: Every practitioner must train himself to learn accurately the nature and effects of remedial measures, both by reading and by observation.—*Tr. Am. M. Ass. Sec. Pharm. & Therap.* 1912, p. 18.

Fantus, Bernard: Pharmacists should confine themselves in their propaganda literature intended for doctors to the discussion of things they really know better than doctors, e. g., pleasant administration.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1191.

Crombie, James: The art of flavoring; a discourse on the value, pleasing appearance, and pleasant flavor for creating a favorable impression.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 538-541.

Wallace, George B.: The influence of pathologic conditions on the action of drugs.—*J. Am. M. Assoc.* 1912, v. 59, p. 839-841. See also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 40-47.

Jackson, D. E.: The peripheral action of certain drugs with special reference to the lungs.—*J. Pharmacol. & Exper. Therap.* 1912-13, v. 4, p. 291-320.

Editorial: Brief historical note on the enema in the 18th century, with special reference to the experiences of Louis XIV.—*Brit. M. J.* 1912, v. 2, p. 811.

Bock, August: On the occurrence of fever after intravenous injections.—*Arch. exper. Path. u. Pharmacol.* 1912, v. 68, p. 1-40.

Reader, Norbert L. M.: Illustrated description of a new apparatus for giving saline infusions.—*Lancet*, 1912, v. 182, p. 1767.

Souttar, H. S.: Illustrated description of a thermos saline infusion apparatus.—*Lancet*, 1912, v. 182, p. 1480.

Editorial: Caution as to the use of intravenous injections, with special reference to the investigations of Hort and Penfold, and of Evans.—*Therap. Gaz.* 1912, v. 36, p. 325.

Editorial: Fevers following subcutaneous injections. Observations giving warning of the importance of extreme care in the preparation of all solutions for injection, and of the need of a pure solvent in any event.—*J. Am. M. Assoc.* 1912, v. 59, p. 2156.

Editorial: Some untoward features of subcutaneous nutrition.—*J. Am. M. Assoc.* 1912, v. 59, p. 2154.

Smith, F. A. Upsher: Cataphoresis or iontophoresis. The advantages of ionization and the method of application.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 837-839.

Blair, Henry C.: Compressed tablets are the poorest form of administering medicines.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 18.

II. INTERNATIONAL STANDARDS.

1. INTERNATIONAL CONFERENCE FOR THE UNIFICATION OF PHARMACOPEIAL FORMULÆ FOR POTENT MEDICAMENTS (BRUSSELS CONFERENCE).

1. ADOPTION OF BRUSSELS CONFERENCE PROTOCOL.

Hofman, J. J.: International cooperation in pharmacy; consideration of the need for preparing international standards for widely used drugs.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1129–1135.

MacEwan and Forrester: International commission on variations in the activity of certain toxic drugs. Preliminary report by the secretaries.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 26, p. 349–352.

Resolution X: (*a*) That Section VIIIb. of the Eighth International Congress of Applied Chemistry consider the feasibility of international standards of strength, purity, method of testing, and nomenclature of pharmacopœial preparations. (*b*) Section VIIIb. (Pharmaceutical Chemistry) of the Eighth International Congress of Applied Chemistry having received and discussed the report of the International Commission on "Variation in the activity of toxic drugs," resolves that it is desirable that this inquiry be continued.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 27, p. 235.

Achard, H. J.: In our days of globe trotting prescriptions should call for absolutely standardized preparations the world over.—*Am. J. Clin. Med.* 1912, v. 19, p. 257.

Editorial: While an international pharmacopœia is out of the question, it is possible that present pharmacopœias will be modified so that they will answer the purpose for other sections of the country. The U. S. P., Spanish edition, is meeting with considerable sale in the South American republics and in the Spanish dependencies of the United States. Canadian pharmacists find that they have as much, or more, use for the U. S. P. as for the Ph. Brit. It is suggested that an Anglo-American pharmacopœia be issued.—*Meyer Bros. Drug.* 1912, v. 33, p. 66.

Wilbert, M. I.: Table showing the approximate degree of compliance with the provisions of the Brussels Conference as evidenced in the pharmacopœias published from 1905 to 1910, inclusive.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 122.

Engelhardt, H.: The requirements of foreign pharmacopœias for several of the vegetable drugs. A number of tables showing the requirements of individual pharmacopœias for drugs and preparations.—D.-A. Apoth. Ztg. 1912, v. 33, p. 127-131.

The appended table is a compilation of the data included in the tables referred to above. The figures, unless otherwise noted, refer to alkaloidal content and the dash (—) indicates that the drug or preparation is included without specific requirements.

Table showing the requirements embodied in the several pharmacopœias for some of the official vegetable drugs.

[As outlined by H. Engelhardt.—D. A. Apoth.-Ztg., 1911-12, v. 33, p. 127-131.]

	Ph. Belg. III.	Ph. Brit. IV.	Ph. Dan. VII.	Ph. Germ. V.	Ph. Fr. V.	Ph. Ndl. IV.	Ph. Ital. III.	Ph. Japon. III.	Ph. Austr. VIII.	Ph. Svec. IX.	Ph. Helv. IV.	Ph. Hung. III.	Ph. Hosp. VII.	U. S. P. VIII.
Aconite..... Fluid extract of.	0.8	—	—	—	—	—	—	0.5	—	—	0.8	—	—	0.5 .4
Tincture of.	.05	—	—	—	—	—	0.05	—	—	—	0.05	—	—	.045
Asafetida, alcohol soluble.	50	65	—	50	—	0.25	60	50	50	50	50	50	50	50
Permissible ash.	8	10	10	15	10	60	10	10	10	10	10	10	10	15
Tincture of.	8	—	—	—	—	3.5	—	—	—	—	—	—	—	3
Belladonna leaves..... Extract of.	1.5	—	—	3	—	—	—	—	—	—	.35	—	—	3
Fluid extract of.	—	75	—	1.5	—	1.15	.5	.5	2	1.3	1.5	0.91-1.06	—	1.4
Tincture of.	—	.048-.052	—	—	—	—	—	—	.03	—	.035	—	—	.03
Belladonna root..... Fluid extract of.	—	—	—	—	—	—	—	—	—	—	.45	—	—	.45
Cinchona (1)..... Cinchona (2).	5 1	5-6	4 1	6.5 12	2.184 10	6 15-18	5 —	5 12.5	5 7.5	5 —	6.5 12	6 12	2.5-3.5	5
Extract of (1). (2).	10 2	—	—	—	—	—	—	—	—	—	—	—	—	—
Fluid extract of (1). (2).	5 1	5	—	3.5	5	4	—	—	4	—	6	4	—	4
Tincture of (1). (2).	1 2	.95-1.05	—	.74	—	—	—	.5	—	—	—	—	—	.75
Cinchona red (1). (2).	—	—	—	—	5	—	—	—	—	—	—	—	—	5
Compound tincture of.	—	.045-.055	—	.37	1.09	—	—	—	—	—	.7	2.3	2.3	—
Coca..... Fluid extract of.	—	—	—	—	—	—	—	—	—	—	.7	—	—	.5
Cola..... Fluid extract of.	—	—	—	—	1.26	—	—	—	1.5	—	1.5	—	—	.5
Tincture of.	—	—	—	—	1.25	—	—	—	1.0	—	1.5	1.0	—	—
Colchicum corn..... Extract of.	—	—	—	—	—	—	—	—	—	—	—	—	—	.35
Colchicum seed..... Extract of.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.45
Fluid extract of.	—	—	—	—	—	—	—	—	—	—	—	—	—	.4
Tincture of.	—	—	—	—	—	—	—	—	.04	—	—	—	—	.04
Conium..... Extract of.	—	—	—	—	—	—	—	—	—	—	—	—	—	.38-0.42
Tincture of.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guarana..... Fluid extract of.	—	—	—	—	—	—	—	—	—	—	4.0	4.0	3.0	3.5 3.5

[illegible]

A reply to a query calls renewed attention to the Brussels Conference and the international treaty on uniformity of pharmacopœial formulæ for potent medicaments, and points out that in practically all of the countries of Europe where the National pharmacopœias have been revised, the provisions of the treaty have been closely adhered to. The total number of compliances with article 1 of the original protocol has been increased from 129 in 1902 to 260 in 1910, while the non-compliances have been reduced from 131 in 1902 to 15 in 1910; the present U. S. P. being responsible for no less than 5 of the latter.—*J. Am. M. Assoc.* 1912, v. 59, p. 2175.

Richter, R.: The Ph. Germ. V has not adopted the recommendation of the Brussels Conference that tinctures of potent drugs be made by percolation.—*Pharm. Zentrallh.* 1912, v. 53, p. 1271.

Wiebelitz: The adherence to the Brussels Conference Protocol precludes the use of wine as a menstruum in making of extractive preparations.—*Pharm. Ztg.* 1912, v. 57, p. 838.

Glücksman, C.: Presents the following table of fixed constants for official diluted acids:

Pharmacopœia.	Acid acetic.	Acid hydrochl.	Acid nitric.	Acid phos- phoric.	Acid sulphuric.
Ph. Austr. VIII.....	30.0	12.5	-----	20.0	16.66
Ph. Hung. III.....	20.0	10.0	10.0	20.0	10.0
Ph. Croat. Slaven.....	20.0	10.0	10.0	20.0	10.0
Ph. Germ. V.....	30.0	12.5	-----	25.0	16.0
Ph. Helv. IV.....	30.0	10.0	10.0	10.0	10.0
Ph. Austr. VII.....	20.4	12.4	21.42	16.66	16.66

—*Pharm. Praxis*, 1912, v. 11, p. 148.

Mayo, Caswell A.: The report of the committee on an international committee on pharmaceutical nomenclature expresses the belief that a further agitation of the movement will have a good effect in preventing or at least checking somewhat the future dangerous duplication of names for drugs and medicinal products.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1076.

Army, H. V.: Half-normal volumetric solutions of cobalt chloride, ferric chloride and cupric sulphate are used as standards, and blends of these standards will yield an almost infinite number of hues, readily reproduced.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 26, p. 319-329. See also *J. Am. Pharm. Assoc.* v. 2, p. 76-80.

Bailey, A. R.: An Australian protest against the adoption of the U. S. P. as a standard, because the U. S. P. preparations might have quite a different formula from those of the Ph. Brit. and danger might result.—*Chem. & Drug. Australas.* 1912, v. 27, p. 394.

Hofman, J. J.: Outline of the plan for international cooperation in pharmacy, as embodied in the organization of the Fédération In-

nationale Pharmaceutique.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1129–1135. See also Pharm. J. 1912, v. 89, p. 268.

Anon.: The organization of the Fédération Internationale Pharmaceutique.—Ber. pharm. Gesellsch. 1912, v. 22, p. 4–8, 288. Also Apoth.-Ztg. 1912, v. 27, p. 153–154.

For a concise abstract of the proceedings of the Fédération Internationale Pharmaceutique, see Bull. Soc. roy. Pharm. Bruxelles. 1912, v. 56, p. 289, ff.

2. DROPS AND DROPPERS.

Kunz-Krause, Hermann: An illustrated description of a normal drop counter of the Salleron type.—Chem. Ztg. 1912, v. 36, p. 15–16. See also Pharm. Post, 1912, v. 45, p. 146–147, and Pharm. Weekblad, 1912, v. 49, p. 147.

Anon.: An illustrated description of an ingenious device for filling pipettes or for use as a medicine dropper.—Apoth.-Ztg. 1912, v. 27, p. 962. See also Pharm. Zentralh. 1912, v. 53, p. 48.

Kunz-Krause, H.: An illustrated description of a glass rod dropping device.—Chem. Ztg. 1912, v. 36, p. 260.

Pinneo, Frank Wilcox: An illustrated description of a new regulating dropper, for ether or chloroform, that may be used on any form of container.—J. Am. M. Assoc. 1912, v. 59, p. 877.

2. FOREIGN PHARMACOPŒIAS.

Editorial: Calls attention to the fifteenth edition of Martindale and Westcott's Extra Pharmacopœia, which has been issued in two volumes, selling at 14s. and 7s. respectively.—Chem. & Drug. 1912, v. 81, p. 50.

1. GERMAN.

The fifth edition of the German Pharmacopœia is still being actively discussed in the pharmaceutical journals of Germany and the Continent of Europe generally. While the tenor of this discussion is generally favorable it is nevertheless critical and designed to call attention to the several errors of omission and of commission that are embodied in the Pharmacopœia.

Schneider and Richter: Continuation of a review of the Ph. Germ. V.—Pharm. Zentralh. 1912, v. 53, p. 185 ff.

Lefeldt, M.: Observations on the examination of medicaments according to the Ph. Germ. V.—Pharm. Ztg. 1912, v. 57, p. 371–372.

Wiebelitz: Some additional comments on the testing of medicaments according to the Ph. Germ. V.—Pharm. Ztg. 1912, v. 57, p. 413.

J. D. Riedel, A.-G.: A discussion of the Ph. Germ. V requirements for chemical and vegetable drugs.—Riedel's Berichte, 1912, p. 38–52. See also Südd. Apoth.-Ztg. 1912, v. 52, p. 182–183.

Caesar & Loretz: The now official Ph. Germ. V requires varied and more complete tests for the drugs used and, for a large number of drug powders, limits the ash content and the moisture content of the drug; it also describes the alkaloid content.—*Jahres-Ber.* 1912, p. 3.

Wolter, F.: Examination of official articles according to the Ph. Germ. V.—*Pharm. Ztg.* 1912, v. 57, p. 472.

Frerichs and Mannheim: The volumetric solutions of the Ph. Germ. V, their production and uses.—*Apoth.-Ztg.* 1912, v. 27, pp. 835-837, 847-850, 967-969.

Book review: The commentary on the Ph. Germ. V, by Anselmino, Gilg, and others.—*Ber. pharm. Gesellsch.* 1912, v. 22, p. 426.

Richter, R.: Criticism of the commentary by Anselmino and Gilg on the Ph. Germ. V.—*Pharm. Zentralh.* 1912, v. 53, pp. 71-72.

Book review: Comments on the technical methods of testing included in the Ph. Germ. V, by Georg Heyl.—*Ber. pharm. Gesellsch.* 1912, v. 22, pp. 57-58.

Taub, Ludwig: Tables showing the date of publication of the several German pharmacopœias; also a review of the number of articles included therein.—*Ztschr. ang. Chem.* 1912, v. 25, p. 2151. See also *Pharm. Ztg.* 1912, v. 57, p. 886.

2. ITALIAN.

Zampolli, L. M.: A comparison of the Ph. Ital. III and the Ph. Helv. IV.—*Boll. chim. farm.* 1912, v. 51, pp. 184-185.

3. FRENCH.

François, Maurice: The Codex and the law to regulate frauds; some desirable changes that are required.—*Bull. Internat. Rep. Fraudes*, 1912, v. 5, pp. 171-178.

4. SWISS.

Zampolli, L. M.: A comparison of the Ph. Ital. III and the Ph. Helv. IV.—*Boll. chim. farm.* 1912, v. 51, p. 184-185.

Schamelhout, A.: Brief note on the comparison made by Zampolli between the Swiss and the Italian Pharmacopœias.—*Bull. Soc. roy. Pharm. Bruxelles*, 1912, v. 56, p. 255.

5. AUSTRIAN.

Anon.: Critical discussion of some of the Ph. Austr. VIII monographs for drugs and preparations.—*Pharm. Post*, 1912, v. 45, p. 37-41.

Mindes, J.: A criticism of some of the galenical preparations in the Ph. Austr. VIII.—*Ztschr. allg. österr. Apoth.-Ver.* 1912, v. 50, p. 21-22. See also G. Hell & Co., p. 35-36.

6. JAPANESE.

Anon.: The Japanese Minister of the Interior has authorized a number of changes in the Japanese Pharmacopœia of 1907. These changes become official on July 1, 1912, and apply almost exclusively to the tests for purity, a number of the tests being revised, and some additional new tests added. A total of 12 pharmacopœial articles is involved and some of the changes are quite comprehensive.—*Pharm. Ztg.* 1912, v. 57, p. 307.

Anon.: Brief note of revisions of some of the articles in the *Ph. Japon.* III proclaimed by the Home Minister to take effect July 1, 1912.—*Chem. & Drug.* 1912, v. 80, p. 323.

Editorial Note: *P. J.* III is the abbreviation for the new pharmacopœia of Japan, which goes into force July 1, 1912.—*Meyer Bros. Drug.* 1912, v. 33, p. 102.

7. BELGIAN.

Schamelhout, A.: Announcement of the first supplement to the *Ph. Belg.* III, with a list of the articles included, giving the new or modified titles. *Bull. Soc. roy. Pharm. Bruxelles*, 1912, v. 56, p. 253.

The list of proposed additions, to be included in a supplement to the *Ph. Belg.* III, will be found in the *J. Pharm. Anvers*, 1912, v. 68, p. 646-670. See also *Chem. & Drug.* 1912, v. 81, p. 465.

Schamelhout, A.: Report of the provisional text of the first supplement to the *Ph. Belg.* III, which contains 23 new products, 17 chemical substances, 1 drug, and 5 preparations, 2 of which in reality make but one. Five pharmacopœal articles have been modified—2 chemical products and 3 preparations. The supplement includes also a new chapter and 3 new reagents; moreover, a table of chemical formulas and of errata and addenda. It takes no account of the conclusions of the Tenth International Congress of Pharmacy, with reference to the determination of physical constants and chemical assays. *Bull. Soc. roy. Pharm. Bruxelles*, 1912, v. 56, p. 261-270.

Anon.: A review of the supplement of the *Ph. Belg.* III.—*Ann. Pharm. Louvain*, 1912, v. 18, p. 242-264.

Dauphin, J.: The precautions to be observed in the preparation of official *Ph. Belg.* III fruit juices and sirups.—*Ann. Pharm. Louvain*, 1912, v. 18, p. 335-337.

8. BRITISH.

MacAlister, Donald: The Pharmacopœial Committee, with the help of its editors, has been engaged in preparing for press the draft of 4 large sections of the text of the revised Pharmacopœia. It is hoped that the first proofs might be ready for submission to the committee early in the new year, and that thereafter the work that still

remains to be done will be rapidly advanced.—*Brit. & Col. Drug.* 1912, v. 62, p. 467.

Editorial: The next issue of the *Ph. Brit.* will apparently not be published for some considerable time, since it may be necessary to print a small additional impression of the present edition before the new one is ready for publication.—*Pharm. J.* 1912, v. 89, p. 705.

Editorial: The increased requirements in regard to standards, which are to be a feature of the next edition of the *Ph. Brit.* will probably lead more than ever to the abandonment of the assay of galenicals and chemicals by retailers.—*Chem. & Drug.* 1912, v. 31, p. 512.

Parry, Ernest J.: It is the one-sided aspect of affairs that has prevented the English legislature from recognizing the British Pharmacopœia as a standard, and, until it can be produced in a very different manner from that now in vogue, it is certain that it will not be so recognized.—*Am. Perf.* 1911-12, v. 6, p. 201.

9. BRITISH PHARMACEUTICAL CODEx.

Editorial: In its present form the B. P. C. is unquestionably the most complete book on medicines in use in the British Empire. It should prove of great service to medical practitioners in regard to the important subject of the prescribing of medicines.—*Brit. M. J.* 1912, v. 1, p. 95.

Anon.: A book notice states that the British Pharmaceutical Codex is devised not to break new ground but to compete with existing publications.—*Chem. & Drug. Australas.* 1912, v. 27, p. 40.

Anon.: Review of recent press opinions of the B. P. C. 1911.—*Pharm. J.* 1912, v. 88, p. 250-252.

Book Review: The second edition of the British Pharmaceutical Codex is described as being a most commendable work, one that reflects excellent judgment and ability and one that is most creditable to the Council of the Pharmaceutical Society of Great Britain.—*Am J. Pharm.* 1912, v. 84, p. 329.

Editorial Note: The Council of the Pharmaceutical Society has appointed four reporters to collate information for their revision of the British Pharmaceutical Codex.—*Pharm. J.* 1912, v. 88, p. 567.

Schimmel & Co.: Unfortunately many erroneous statements have been transferred into the new edition of the B. P. C. from the first edition, although numerous statements have been corrected.—*Semi-Annual Rep.*, April, 1912, p. 137.

"A Constant User.": Review of the B. P. C. as a pharmaceutical text book.—*Pharm. J.* 1912, v. 89, p. 228.

Lacey, Rankin and Bailey: Objection is raised to the adoption of the B. P. C. as an official standard, on the ground that it is not an acceptable standard and that it has been severely criticized.—*Chem. & Drug. Australas.* 1912, v. 27, p. 395.

III. COMMENTS ON OFFICIAL ARTICLES.

ACACIA.

Swain, Robert Lee: *Acacia senegal* bears the name of a country and river of Western Africa.—Drug. Circ. 1912, v. 56, p. 63.

Richter, R.: The Ph. Germ. V now gives the origin of acacia as *A. senegal* (Linne) Wildenow, and other African varieties of acacia.—Pharm. Zentralh. 1912, v. 53, p. 566.

Adlung: Acacia is obtained from widely varying plants. *A. senegal* is obtained from a tree belonging to the mimosa family, indigenous to Senegambia and the region of the White Nile.—Apoth.-Ztg. 1912, v. 27, p. 147.

French, Harry B.: Gum Arabic is usually collected in huge piles at Khartoum before being shipped to Port Soudan. The sand and fine stuff, which is of little value, is very apt to sift to the bottom, and consequently the first orders are apt to be cleaner than those that are filled later.—J. Am. Pharm. Assoc. 1912, v. 1, p. 834.

Gehe & Co.: From January 1, 1912, the Egyptian government imposes an export duty of 15 per cent on acacia. Senegal gum has been extremely scarce, and during the year 1911 practically none was available.—Handelsbericht, 1912, p. 70-72. Also Südd. Apoth.-Ztg. 1912, v. 52, p. 231, and Caesar & Loretz: Jahres-Ber. 1912, p. 60-61.

Tunmann, O.: A table showing the importation of acacia into Hamburg from 1897 to 1910, inclusive. The German African colonies furnish but comparatively small quantities of this drug.—Apoth.-Ztg. 1912, v. 27, p. 69-70.

Rippeto and Minor: Seven samples of acacia examined contained from 2.35 to 2.68 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 436-444.

North, Horace: Fifteen samples of acacia analyzed gave ash varying from 1.23 to 2.60 per cent.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 9.

Mann, E. W.: Five samples of acacia yielded from 2.34 to 3.64 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 5.

Schirmer, Wolfgang: A contribution to the chemical knowledge of gums and mucilages. The continuation of some previously published work.—Arch. Pharm., 1912, v. 250, p. 230-251.

Gane, E. II.: The powdered gum will almost always reduce an alkaline copper tartrate solution. It should not be rejected on this ground alone.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 371.

Richter, R.: The Ph. Germ. V directions for making mucilage of acacia involve dissolving the acacia in a completely filled, closely stoppered bottle, so as to avoid evaporation of water and access of air.—*Pharm. Zentralh.* 1912, v. 53, p. 805.

Jensen, II. R.: One sample of mucilage freshly prepared from high grade gum, without the addition of limewater, was observed by direct titration (phenolphthalein) to have an acidity equal to about 2.8 per cent free arabic acid (or 0.35 per cent as acetic acid).—*Evans' An. Notes*, No. 7, 1912, p. 5.

ACETANILIDUM.

Anon.: The differentiation of acetanilide and exalgine.—*Rev. Farm. Buenos Aires*, 1912, v. 55, p. 241-242.

Webster, D. H.: The melting point of acetanilide was found to be 112°. Solution in chloroform found to have a slightly alkaline reaction.—*Pharm. Weekblad*, 1912, v. 49, p. 402.

Brown, Linwood A.: Nine samples analyzed; melting point, 113-114°; other tests conform to U. S. P.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 48.

Smith, Carl E.: The melting points of good products may range between 112° and 115°, but authorities give between 112° and 116° for the pure substance.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 295.

Ford, Charles M.: Acetanilide is a habit-forming drug, though it is seductive.—*Proc. Nebraska Pharm. Assoc.* 1912, p. 113.

Siggins, F. M.: All remedies containing acetanilide, acetphenetidin or a like product of coal tar are dangerous and should be used with caution.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 197.

Ladd, E. F.: Practically every headache powder on the market contains acetanilide or some other of the coal-tar preparations.—*Northwestern Drug.* 1912, v. 13, Aug., p. 64.

Editorial Note: Of 150 samples of headache powders collected throughout Canada, there were 115 in which acetanilide was the chief ingredient.—*Chem. & Drug.* 1912, v. 80, p. 730.

Dickens: Dangers of coal-tar derivatives as used in medicine. The official dose of acetanilide should never be over 4 grains, as 5 grains have produced death.—*Proc. Mississippi Pharm. Assoc.* 1912, p. 107.

Lowe, Clement B.: An ointment containing 5 per cent of acetanilide was used for a number of weeks on a lad who was burned very seriously; about the time most of the body was healed up the child died from heart failure.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 206.

Osborne, Oliver T.: Acetanilide, on account of the dose being small (and the dose should always be small) is the most valuable of depressomotors.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

ACETONUM.

Smith, Carl E.: The test and physical constants given in the U. S. P. can not be entirely relied upon to determine if a given sample contain the required percentage of absolute acetone.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 295.

Rosenbloom, Jacob: In the presence of protein, Lieben's and Gunning's test for acetone are negative and require the use of the distillate for positive results.—*J. Am. M. Assoc.* 1912, v. 59, p. 445.

Fish, Pierre A.: Equal parts of acetone and 95 per cent alcohol are used, or in some cases one part of acetone and two of alcohol have been used with excellent results to disinfect the skin before operation.—*Am. Vet. Rev.* 1911-1912, v. 40, p. 27.

ACETPHENETIDINUM.

Puckner, W. A.: The present description in N. N. R. is to be modified to indicate more clearly that the name phenacetin is a synonym for the official title acetphenetidin.—*J. Am. M. Assoc.* 1912, v. 58, p. 1298; also *Rep. Council Pharm. & Chem.* 1912, p. 12-14.

An unsigned article suggests acetphen., U. S. P., as an abbreviation for the official title, acetphenetidinum.—*N. A. R. D. Notes* 1911-1912, v. 13, p. 819.

Richter, R.: The Ph. Germ. V now includes test for parphenetidin in phenacetin.—*Pharm, Zentralh.* 1912, v. 53, p. 958.

Puckner, W. A.: The relative purity of acetphenetidin and phenacetin.—*J. Am. M. Assoc.* 1912, v. 58, p. 801. See also editorial p. 787, and *Rep. Chem. Lab. Am. M. Assoc.* 1912, v. 5, p. 60-68.

Scoville, W. L.: Samples of phenacetin melted at 131° to 135°.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

Smith, Carl E.: The U. S. P. Melting point interval should be widened to from 133° to 135°. Nonvolatile matter should not exceed 0.05 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 295.

Editorial Note: Of 150 samples of headache powders collected throughout Canada, 24 contained phenacetin.—*Chem. & Drug.* 1912, v. 80, p. 730.

Siggins, F. M.: All remedies containing acetanilide, acetphenetidin or a like product of coal tar are dangerous and should be used with caution in extreme cases only, and never habitually.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 197.

Siggins, F. M.: After two or three days' use of even a moderate dose of acetphenetidin I find myself almost completely benumbed,

and heart action very weak.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 195.

Piccinini, Guido M.: The gases of the blood during the administration of antipyrine, phenacetin, and antifebrin diminish the total oxygen of the blood circulating in the arteries.—*Arch. Internat. Pharm. et Thérap.* 1912, v. 22, p. 27-47.

ACIDUM ACETICUM.

Gehe & Co.: Quotes Fincke, who outlines a test for formic acid in acetic acid made from wood.—*Handelsbericht*, 1912, p. 108.

Smith, Carl E.: If nonvolatile matter is determined after supersaturation with ammonia water, as officially directed, allowance should be made for non-volatile impurities in the latter.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 296.

Brown, Linwood A.: Twenty-three samples varied from 25.94 to 30.24 per cent; 12 badly deficient.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 46.

Cook, Alfred N.: A sample of acetic acid assaying 80 per cent of U. S. P. strength was not passed.—*Rep. South Dakota F. & D. Com.* 1912, p. 50.

Street, John Phillips: Of 25 samples of acetic acid examined during 1912, 10 were adulterated or below standard.—*Rep. Connecticut Agric. Exper. Sta.* 1912, p. 208.

Tilford, J. Floyd: Of 10 samples of acetic acid examined, 3 were illegal.—*Rep. Kansas Bd. Health*, 1912, p. 113.

Havenhill, L. D.: A few samples of this acid have been examined and all but one have been found to correspond to what is commercially known as No. 8.—*Proc. Kansas Pharm. Assoc.* 1912, p. 60.

Pearson, W. A.: Two samples rejected because of dark color.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 168.

Patch, E. L.: A sample labeled pure contained a trace of copper and had a bad pyroligneous odor.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 371.

The Registrar-General reports for England and Wales in 1910, 2 accidental deaths and 1 suicide from acetic acid.—*Pharm. J.* 1912, v. 89, p. 96.

ACIDUM ACETICUM DILUTUM.

Smith, Carl E.: Diluted acetic acid is too weak for direct application of the test for formic and sulphurous acids and concentration before testing is likely to eliminate these volatile impurities, therefore it seems best to supersaturate it with a fixed alkali, then evaporate to the required volume, before making the test.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 296.

Crabbé, Maurice: It is recommended that the Ph. Belg. description be changed so as to read: It contains 4 per cent of water and 96 per cent of crystallizable acetic acid.—*J. pharm. Anvers*, 1912, v. 68, p. 605.

Wulling, Frederick J.: Dilute acetic acid assay yielded 5.85 to 7.42 per cent of absolute acid.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1122.

Ladd, E. F.: Report on 71 samples of dilute acetic acid. A total of 38 were not within 10 per cent of the U. S. P. standard.—*Bull. Agric. Exper. Sta. North Dakota*, v. 2, p. 131-132.

Enz, Karl: Dilute acetic acid was found to contain aluminum oxide.—*Apoth.-Ztg.* 1912, v. 27, p. 942.

ACIDUM ACETICUM GLACIALE.

Smith, Carl E.: A congealing point determination gives the strength of acids above 95 per cent at least as accurately as a titration, in shorter time and with less labor.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 296.

Doolittle, R. E.: Acetic acid, chemically pure, special, 99.9 per cent, some low in acetic acid content, others did not comply with the sulphuric acid bichromate test.—*Ann. Rep. U. S. Dept. Agric.* 1912, Washington, 1913, p. 570.

Orton and Jones: Hydrolysis of acetic anhydride.—*J. Chem. Soc. Lond.* 1912, v. 101, p. 1708-1723.

ACID, ACETYLSALICYLIC.

Seel, Eugen.: Variations in the nature of the available acetylsalicylic acid.—*Therap. Monatsh.* 1912, v. 26, p. 653-655.

Linke, H.: A reply to the criticisms by Seel.—*Therap. Monatsh.* 1912, v. 26, p. 799-802.

Editor.: The chemistry of aspirin or acetylsalicylic acid.—*Pract. Drug.* 1912, v. 30, December, p. 23-24.

Editor, "Queries and Minor Notes": Acetylsalicylic acid was described in chemical literature many years before the American patent was issued.—*J. Am. M. Assoc.* 1912, v. 59, p. 1642.

Fränkel, Sigmund: On the salts of acetylsalicylic acid, with particular consideration of hydropyrine.—*Pharm. Post*, 1912, v. 45, 85-86.

Anon.: Aspirin is incompatible with alkalis and their carbonates, producing acetates and salicylates.—*Pharm. Post*, 1912, v. 45, p. 728.

Schamelhout, A.: The supplement to the Ph. Belg. III should permit a slight odor, as is the case in the Ph. Helv. IV.—*Bull. Soc. roy. Pharm. Bruxelles*, 1912, v. 56, p. 263.

Scoville, W. L.: Ten samples melted at 130° to 136°.—J. Am. Pharm. Assoc. 1912, v. 1, p. 373.

Wester, D. H.: Acetylsalicylic acid was found to contain free salicylic acid.—Pharm. Weekblad, 1912, v. 49, p. 402. See also Richter, Ernst.: Apoth.-Ztg. 1912, v. 27, p. 50.

Wolter, F.: Samples of acetylsalicylic acid were found to give with dilute solution of ferric chloride a distinct violet coloration.—Pharm. Ztg. 1912, v. 57, p. 472.

Danielsohn, P.: Tablets of aspirin and of acetylsalicylic acid were found to be practically identical. For economic reasons the tablets of acetylsalicylic acid were preferred.—(Münch. med. Wehnschr. 1912, v. 59, p. 1046.) Zentralbl. exper. Med. 1912, v. 2, p. 333.

Gehe & Co.: The Ph. Germ. V test for the presence of free salicylic acid in acetylsalicylic acid is not satisfactory as the addition of borax, sodium phosphate, tartaric acid, citric acid or other oxyacids serves to mask the reaction.—Handelsbericht, 1912, p. 109. Also Pharm. Ztg. 1912, v. 57, p. 311.

Riedel, J. D. A.-G.: A slight violet color should be permitted in connection with the test for free salicylic acid.—Südd. Apoth.-Ztg. 1912, v. 52, p. 182, also Riedel's Berichte, 1912, p. 38.

Lorier, Le.: Note on a new process for the colorimetric estimation of acetylsalicylic acid.—Compt. rend. Soc. Biol. 1912, v. 73, p. 116.

Mansfield, William: Microscopical analysis of aspirin and acetylsalicylic acid.—Pract. Drug. 1912, v. 30, December, p. 25.

Michiels and Vandermeulen: The determination of acetylsalicylic acid and of *b*-oxybutyric acid in urine.—Ann. Pharm. Louvain, 1912, v. 18, p. 479-486, 526-538.

Máthé, Michael: On the hydrolytic decomposition of acetylsalicylates and the preparation of calcium acetylsalicylate.—Pharm. Post, 1912, v. 45, p. 474-476, 481-483.

Editorial Note: Of 150 samples of headache powders collected throughout Canada, 8 contained aspirin.—Chem. & Drug. 1912, v. 80, p. 730.

Needham, R. H.: Safer than the more depressant coal-tar derivatives, it is efficient as an antipyretic and diaphoretic and, last but not least, is one of the best sellers in the drug stores to-day.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1348.

Anderson, H. B.: Report of two cases of angioneurotic eruption due to acetylsalicylic acid.—J. Am. M. Assoc. 1912, v. 59, p. 1470.

Schrader, W. F.: Report of an eruption over the head and face and in the mouth and throat, of raised, bright red spots, from $\frac{1}{8}$ to $\frac{3}{8}$ inch in diameter after a 5-grain dose of aspirin.—Am. J. Clin. Med. 1912, v. 19, p. 851.

Chambers, Graham: Acetylsalicylic acid, with special reference to its value in typhoid fever.—*Brit. M. J.* 1912, v. 1, p. 121. See also W. Harrison Martindale, p. 273, on the solution and decomposition of the acid.

Riedel, J. D. A.-G.: A review of some of the recent literature relating to the pharmacology and therapy of acetylsalicylic acid.—*Riedel's Berichte*, 1912, p. 55.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.*; *J. Soc. Chem. Ind. and Chem. Zentralbl.*

ACIDUM BENZOICUM.

Smith, Carl E.: Benzoic acid from benzoin, as now found on the market, contains less of its characteristic impurities than formerly and sometimes scarcely differs in solubility and melting point from the artificial acid.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 296.

Lefeldt, M.: To insure genuineness, benzoic acid should be prepared by the apothecary from benzoin.—*Apoth.-Ztg.* 1912, v. 27, p. 931.

Wiebelitz: Samples of benzoic acid obtained from reliable houses will readily comply with all of the requirements of the Ph. Germ.—*Apoth.-Ztg.* 1912, v. 27, p. 950-951.

Wester, D. H.: Benzoic acid does not always comply with the permanganate test.—*Pharm. Weekblad*, 1912, v. 49, p. 402.

Scoville, W. L.: The test for chlorine compounds is not reliable for distinguishing between the natural and artificial.—*J. Am. Pharm. Assoc.*, 1912, v. 1, p. 371.

Revis, Cecil: Note on the detection of benzoic acid in milk. The test with ferric chloride is the most reliable and characteristic.—*Analyst*, 1912, v. 37, p. 346.

Biernath, O.: The Jonescu method for determining benzoic acid in foodstuffs.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 191. Also *Pharm. Ztg.* 1912, v. 57, p. 176.

Frear, William: A simple apparatus for gravimetric determination of benzoic acid, with illustration.—*Am. Food J.* 1912, v. 7, August, p. 11.

Morey, George W.: Benzoic acid as an acidimetric standard.—*J. Am. Chem. Soc.* 1912, v. 34, p. 1027-1032. Also *Bull. Bur. Stand.* 1912, v. 8, p. 643-650.

Long, John H.: The active principles in cloves, cinnamon, allspice, etc., are true chemical compounds and in their action on the body and final disposition are much like benzoic acid, now made largely by laboratory processes.—*J. Am. M. Assoc.* 1912, v. 59, p. 1481.

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Gerlach, V.: The physiological effect of benzoic acid and sodium benzoate. (Wiesbaden, 1909, pp. 8+95, pls. 10.)—*Exper. Sta. Rec.* 1912, v. 27, p. 365.

ACIDUM BORICUM.

Gehe & Co.: Boric acid and borax continue to be in active demand. The imports into Germany aggregated 53,580 cwt. in 1911, as against 36,773 cwt. in 1909.—*Handelsbericht*, 1912, p. 109.

Smith, Carl E.: In the identity test with turmeric paper ammonia changes the color to greenish-black, not bluish-black, as stated in the U. S. P. The test for arsenic as now given permits the presence of at least 20 parts per million, which seems rather too much.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 297.

Mann, E. W.: In no case did the amount of arsenic present in any one of the 33 samples tested exceed one part per million.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 38.

Editorial: An arsenic limit for boric (boracic) acid of 4 parts per million has been established in Canada by an Order in Council.—*Pharm. J.* 1912, v. 89, p. 804.

Jensen, H. R.: Of 132 samples tested, two contained 20 and 36 parts per million of arsenic, an excessive amount.—*Evans' An. Notes*, No. 7, 1912, p. 15.

Johnson & Johnson: The commercial article seems to be of a very high degree of purity; from 99 to 100 per cent.—*Lab. Notes*, 1912, p. 8.

Brown, Linwood A.: Thirty-two samples analyzed; three contained sulphates, one magnesium, one chlorides, two gave turbid solution in alcohol.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 48.

Patch, E. L.: Two samples of boric acid contained excess of sulphate and calcium.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 371.

Oediger, W.: A sample of powdered boric acid was found to contain a considerable quantity of alum.—*Apoth.-Ztg.* 1912, v. 27, p. 166.

Anon.: Of 17 samples of boric acid analyzed under the sale of food and drugs act during 1911, 4 were found to be adulterated or not up to standard.—*Pharm J.* 1912, v. 89, p. 810.

Serger, H.: Method for the valuation of surgical dressings containing boric acid.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 126.

Sanders, J. Herbert: Boric acid poisoning, published cases.—*Brit. M. J.* 1912, v. 1, p. 605. See also Vaughan Harley, p. 832, John H. Aytoun, p. 834, and Editorial. *Therap. Gaz.* 1912, v. 36, p. 700.

Cook, Alfred N.: A commercial preservative submitted was found to be composed entirely of boric acid.—*Rep. South Dakota F. & D. Com.* 1912, p. 47.

Cornalba, G.: The detection of boric acid in butter.—*Bull. chim. farm.* 1912, v. 51, p. 433-437.

Betrand and Agulhon: The presence, normally, of boron in animals; found, though in minute quantity, in guinea pig, rabbit, sheep, cow, and horse.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 248.

For additional references see *Index Med.*; *Brit. Food J.*; *J. Am. M. Assoc.*; *Chem. Abstr.*; *J. Soc. Chem. Ind.*; and *Chem. Zentralbl.*

ACIDUM CAMPHORICUM.

Smith, Carl E.: Camphoric acid should yield not more than 0.05 per cent of residue on incineration. The melting point has been found to vary from 183° to 187°. The B. P. C. considers 180° the lowest that may be permitted.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 297.

ACIDUM CITRICUM.

Gehe & Co.: The available supply of citric acid during the year 1911 was limited and the price correspondingly high.—*Handelsbericht*, 1912, p. 110.

Albahary, J. M.: Citric acid, its occurrence and chemistry.—*Ann. falsif.* 1912, v. 5, p. 147–153.

Wehmer: Observations on citric acid fermentation.—*Pharm. Post*, 1912, v. 45, p. 830.

Smith, Carl E.: The U. S. P. gives no tests for tartaric and oxalic acids in citric acid, unless the lime water identity test be so considered. A satisfactory test for tartaric acid used by a number of foreign pharmacopœias is outlined.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 298.

Editorial: An arsenic limit for citric acid of 1 part per million has been established in Canada by an Order in Council.—*Pharm. J.* 1912, v. 89, p. 804.

Jensen, H. R.: Sixty-three samples tested, all but one of which contained below 2 parts per million of arsenic.—*Evans' An. Notes*, No. 7, 1912, p. 22.

Mann, E. W.: Twenty samples examined were all free from arsenic and the highest proportion of lead found was 6 parts per million.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 39.

Pratt, David S.: The determination of citric acid in the presence of other fruit acids by the use of an oxidizing agent.—*Circ. Bur. Chem. Agric.* 1912, No. 88, pp. 7.

Gowing-Scopes, L.: An examination of Beau's modification of Denigés' method for estimating citric acid.—*Pharm. J.* 1912, v. 89, p. 759.

Barnard, H. E.: A sample labeled citric acid was found to be oxalic acid.—*Rep. Indiana Bd. Health*, 1911, 1912, p. 265.

Brown, Linwood A.: Thirty samples analyzed; nine contained an excessive amount of sulphuric acid; one contained 82.72 per cent tartaric acid.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 48.

Diekman, George C.: Of 5 samples of citric acid examined, 4 were found to conform with official requirements.—*Proc. New York Pharm. Assoc.* 1912, p. 131.

40th Ann. Rep. Local Gov't. Bd. 1910-11: Of 40 samples of citric acid examined, 4 were found to be adulterated or not up to standard.—*Brit. & Col. Drug.* 1912, v. 61, p. 62. See also *Pharm. J.* 1912, v. 89, p. 810.

Wester, D. H.: Sample of citric acid was found to contain minute quantities of tartaric acid, also traces of lead.—*Pharm. Weekblad*, 1912, v. 49, p. 402.

Enklaar, J. E.: The neutralization curves and dissociation constants of sulphuric and of citric acid.—*J. prakt. Chem.* 1912, v. 80, p. 617-630.

Hemenway, Henry Bixby: The therapeutic use of citric acid and the citrates.—*J. Am. M. Assoc.* 1912, v. 58, p. 992-995.

ACID, DIETHYLBARBITURIC.

Schamelhout, A.: The supplement to the Ph. Belg. III describes veronal as easily soluble in alcohol, ether, and chloroform.—*Bull. Soc. roy. Pharm. Bruxelles*, 1912, v. 56, p. 263.

Wijnne, A. J.: The melting point of diethylbarbituric acid was found to vary from 185° to 186°. Ph. Ndl. IV supplement requires 191.—*Pharm. Weekblad*, 1912, v. 49, p. 203.

Cohn, Georg.: A review of the chemistry of veronal and some of its compounds.—*Pharm. Zentralh.* 1912, v. 53, p. 29-31.

Deakin and Rivett: The conductivity and dissociation of diacetylbarbituric acid.—*J. Chem. Soc. Lond.* 1912, v. 101, p. 127-131.

Osborne, Oliver T.: Of the newer hypnotics, veronal sodium seems to be the best and safest.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

Editorial: Though attention has been called to the dangers of veronal, the fact that it may produce a rash is not generally known.—*Lancet*, 1912, v. 183, p. 252.

Brewer, Isaac W.: Report of successful results in 22 cases of seasickness treated with veronal. It is not a safe drug to be put in the hands of the public.—*Therap. Gaz.* 1912, v. 36, p. 381.

Gregor, A.: On the secondary actions of hypnotics. Proponal and veronal have a tendency to produce a permanent action, even in moderate doses. A distinctly deteriorating influence on the heart action is noted (increase of pulse rate and arrhythmia)—(*Monatsschr. Psych. u. Neurol.* 1912, v. 32, p. 54). *Zentralbl. exper. Med.* 1912, v. 2, p. 525.

Editorial: Veronal poisoning; the slow excretion of the drug is an element of danger in a repetition of the dose within too brief intervals.—*J. Am. M. Assoc.* 1912, v. 58, p. 196.

McCrae and Colledge: Two cases of veronal poisoning.—*Pharm. J.* 1912, v. 88, p. 724.

Editorial: Brief review of recent literature on veronal poisoning.—*J. Am. M. Assoc.* 1912, v. 58, p. 196.

News note: At an inquest the coroner characterized veronal as a deadly poison which should be treated in the same way as prussic acid with reference to regulations controlling its sale.—*Brit. & Col. Drug.* 1912, v. 61, p. 460.

Editorial: The veronal resolution (placing it in the Poison Schedule) is one of the "don't know where we are" type which will be a constant worry to all having to do with the sale of poisons.—*Chem. & Drug.* 1912, v. 80, p. 408.

Racine, R.: The toxicological detection of veronal.—*Ztschr. öffentl. Chem.* 1912, v. 18, p. 42-45.

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Beringer, Geo. M.: Proposed N. F. monographs for formic acid and for concentrated formic acid.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 166.

Sulzer, H.: A method for the production of ammonia and formic acid from calcium cyanamine.—*Ztschr. ang. Chem.* 1912, v. 25, p. 1268-1273.

Mäder, H.: A bromometric method for the determination of formic acid.—*Apoth.-Ztg.* 1912, v. 27, p. 746-747.

Shannon, F. L.: The detection of formic acid in fruit products.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 526-528.

Berger, Fr.: The ant in the service of medicine.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 51-53.

ACIDUM GALLICUM.

Smith, Carl E.: Gallic acid is not soluble in 40 parts of ether, as stated in the U. S. P. and other authorities. Seidell found it soluble in 72 parts of absolute ether at 25°. A limit of 0.1 per cent of ash must be permitted.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 298.

Diekman, George C.: Of 4 samples of gallic acid examined, 3 were found to conform with official requirements; one contained tannic acid.—*Proc. New York Pharm. Assoc.* 1912, p. 131.

ACID, GLYCEROPHOSPHORIC.

Southall Bros. & Barclay and Roy: Eng. Pat. 2882, Feb. 5, 1912. Manufacture of glycerophosphoric acid and its salts.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 1007. See also p. 900.

Anon.: Glycerophosphoric acid and some of its salts.—*Pharm. Ztg.* 1912, v. 57, p. 410-411.

Jensen, H. R.: A sample of 25 per cent solution had a specific gravity of 1.1178.—Evans' An. Notes, No. 7, 1912, p. 36.

ACIDUM HYDRIODICUM DILUTUM.

Dickman, George C.: Suggested formula and method of preparation for dilute hydriodic acid.—Proc. New York Pharm. Assoc. 1912, p. 116.

Brown, Linwood A.: Twelve samples examined; nine passed, with 90 per cent or over U. S. P. strength. Several samples were discolored, accompanied with high specific gravity of the solution.—Proc. Kentucky Pharm. Assoc. 1912, p. 51.

Smith, Carl E.: The specific gravity in the U. S. P. applies only to products made by the official method, containing a large amount of potassium bitartrate.—J. Am. Pharm. Assoc. 1912, v. 1, p. 298.

ACIDUM HYDROBROMICUM DILUTUM.

Smith, Carl E.: The U. S. P. requirement that no "appreciable" residue should remain after evaporation of 10 cc. is indefinite; a well-made product should leave not more than 0.01 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 298.

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Dowzard, Edwin: A laboratory generator for hydrochloric acid gas, illustrated.—J. Ind. & Eng. Chem. 1912, v. 4, p. 452-453.

Hart, Edward: A laboratory generator for hydrochloric acid gas.—J. Ind. & Eng. Chem. 1912, v. 4, p. 626.

Cowles, A. H.: U. S. Pat. 1040977, Oct. 8, 1912. Process for producing hydrochloric acid and alkali silicoaluminates.—J. Soc. Chem. Ind. 1912, v. 31, p. 1124.

Nagel, Oskar: The production of hydrochloric acid from chlorine.—Chem. Ztg. 1912, v. 36, p. 54.

Smith, Carl E.: Hydrochloric acid should contain more than 0.01 per cent of nonvolatile matter.—J. Am. Pharm. Assoc., 1912, v. 1, p. 298.

Doolittle, R. E.: Hydrochloric acid for reagent purposes was found to be unsatisfactory because of the presence of arsenic.—Ann. Rep. U. S. Dept. Agric. 1912, Washington, 1913, p. 569.

Barnard, H. E.: Of 3 samples of hydrochloric acid examined 1 was found to be illegal.—Rep. Indiana Bd. Health, 1911, 1912, p. 278.

Howard, Charles D.: Of six samples of hydrochloric acid examined three did not comply with the official standard.—Bull. New Hampshire Bd. Health, 1912; v. 1, p. 23.

Tolman and Ferguson: The free energy of dilution of hydrochloric acid, with a description and illustration of the apparatus used,

and a report of experimental results.—J. Am. Chem. Soc. 1912, v. 34, p. 232-246.

McAlister, Alexander: Treatment of typhoid fever with special reference to the use of hydrochloric acid.—Merck's Arch., 1912, v. 14, p. 6-7.

ACIDUM HYDROCHLORICUM DILUTUM.

Cook, Alfred N.: Don't trust to making up your dilute hydrochloric acid without assaying it.—Bull. No. 25, South Dakota F. & D. Dept. 1912, p. 2.

Brown, Linwood A.: Seventeen samples; varied from 40.5 to 122.4 per cent.—Proc. Kentucky Pharm. Assoc. 1912, p. 48.

Ladd, E F: Report on 84 samples of dilute hydrochloric acid, nine of which were not within 10 per cent of the U. S. P. Standard.—Bull. North Dakota Agric. Exper. Sta., v. 2, p. 133-134.

Cook, Alfred N.: Of 29 samples of diluted hydrochloric acid examined, varying from 87 to 124 per cent of U. S. P. strength, 24 were not passed.—Rep. South Dakota F. & D. Com. 1912, p. 50.

Wulling, Frederick J.: Dilute hydrochloric acid assayed from 6.78 to 11.34 per cent of absolute acid. Only dilute acid was examined. The samples met the requirements fairly well.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1122.

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Guignard and Watrigant: First addition, dated Feb. 10, 1911 to Fr. Pat. 436185, Jan. 16, 1911. Process for recovering the hydrocyanic acid contained in gases.—J. Soc. Chem. Ind. 1912, v. 31, p. 489, See also p. 432, 433.

Miraude, Marcel: Presence of hydrocyanic acid in *Trifolium repens* L.—Compt. rend. Acad. Sc., 1912, v. 155, p. 651.

Miraude, Marcel: A new natural group of plants containing hydrocyanic acid, the Calycanthaceæ.—Compt. rend. Acad. Sc. 1912, v. 155, p. 783.

Smith, Carl E.: Hydrocyanic acid is not "completely" volatilized by heat, but should leave not more than 0.01 per cent of residue.—J. Am. Pharm. Assoc. 1912, v. 1, p. 298.

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The Registrar-General reports for England and Wales in 1910, 3 accidental deaths and 34 suicides from hydrocyanic acid.—Pharm. J. 1912, v. 89, p. 96.

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ACIDUM HYPOPHOSPHOROSUM.

Smith, Carl E.: Hypophosphorous acid has been found on the market containing much oxalic acid and calcium oxalate, a dangerous contamination.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 298.

Nitardy, F. W.: There appears no excuse for marketing hypophosphorous acid for "technical use," especially when the order specifically calls for the U. S. P. acid.—*Rocky Mountain Druggist*, 1912, v. 26, July, p. 21.

Jensen, H. B.: One sample of the commercial solution with a specific of gravity 1.1367 contained few impurities.—*Evans' An. Notes*, No. 7, 1912, p. 38.

ACIDUM LACTICUM.

Smith, Carl E.: Criticism of the composition, properties and tests given in the U. S. P. for lactic acid.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 299.

Mindes, J.: Reports a characteristic reaction of lactic acid with potassium bichromate solution and with solution of chromic acid.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 93.

Reichard, C.: Review of the reactions for lactic acid.—*Pharm. Zentralh.* 1912, v. 53, p. 51-56.

Effront, Jean: Under the action of hydrogen dioxide, lactic acid is transformed integrally into acetic acid.—*Compt. rend. Acad. sc.* 1912, v. 154, p. 1296-1298.

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Neuberg, Carl: Note on the iodoform reaction of lactic acid.—*Biochem. Ztschr.* 1912, v. 43, p. 500.

Mondschein, Julius: The quantitative estimation of lactic acid.—*Biochem. Ztschr.* 1912, v. 42, p. 91-104; 105-123.

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Bernegau and E'We.: The present U. S. P. method is unreliable and gives too low results. Murray's or the German Pharmacopœia method should be adopted.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 123.

Brown, Linwood A.: Two samples analyzed; by U. S. P. method of assay, 88.03 and 87.62 per cent; by direct titration, without heating, 74.46 and 76.63 per cent absolute lactic acid.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 48.

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Winfield, James Macfarlane: Summary of 40 cases of psoriasis treated by colonic irrigation and lactic acid. These cases all responded more readily than did the control.—*J. Am. M. Assoc.* 1912, v. 59, p. 416-418.

Haverstick, E. E.: Care should be taken in the use of lactic acid in treating pyorrhœa alveolaris in order to prevent the acid from attacking the teeth, thus causing caries. (*Dent. Sum.*)—*Dental Cosmos*, 1912, v. 54, p. 381.

Gehe & Co.: The consumption of lactic acid, particularly in sections of the country where cholera was threatened, was unusually great. Lactic acid is also being used extensively for the coagulation of rubber.—*Handelsbericht*, 1912, p. 111.

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Reusch, K.: A review of progress in the chemistry of nitric acid.—*Chem. Ztg.* 1912, v. 36, p. 242.

v. Kéler, H.: A review of the progress made in the production of nitric acid during the year 1911.—*Ztschr. ang. Chem.* 1912, v. 25, p. 518-521.

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solutions and the formation of xanthoproteins, has no pharmacological action.—*Ergeb. Physiol.* 1912, v. 12, p. 74.

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Patch, E. L.: One shipment of purified oleic acid contained iron and was very dark colored.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 371.

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Neubauer and Lücker: A discussion of the v. Lorenz method for the determination of phosphoric acid.—*Ztschr. anal. Chem.* 1912, v. 51, p. 161-175.

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Scoville, W. L.: Fifteen samples of phosphoric acid tested 84.4 to 85 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 371.

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Anon.: The chief sphere of usefulness of picric acid is in the brain fog of an overworked mind with the accompanying aggravations of all symptoms on the slightest mental effort.—*J. Am. Inst. Homœop.* 1911–1912, v. 4, p. 1213.

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Sluiter, C. H.: Phenyl-sodium-carbonate as an intermediary product in the Kolbe synthesis of salicylic acid.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 59–62.

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Scoville, W. L.: Crude acid containing traces of gums and resins is frequently offered. It is compact, heavy and usually dark in color.—J. Am. Pharm. Assoc. 1912, v. 1, p. 371.

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Mansfield, William: Pharmacopœial and commercial aconite, with several figures showing the elements of powdered aconite stems.—J. Am. Pharm. Assoc. 1912, v. 1, p. 229–232.

J. D. Riedel, A.-G.: The ash content of aconite was found to vary from 5.3 to 5.4 per cent.—Berichte, 1912, p. 50.

Gane, E. H.: One lot of spongy aconite root rejected; assayed only 0.25 aconitine.—J. Am. Pharm. Assoc. 1912, v. 1, p. 371.

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Vanderkleed, Chas. E.: The assay of 16 samples of aconite root varied from 0.418 to 0.965 per cent of aconitine; 12 above and 4 below standard.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 179.

Street, John Phillips: Of 7 samples of powdered aconite examined during 1912, 5 were adulterated or below standard and 1 was compound.—*Rep. Connecticut Agric. Exper. Sta.* 1912, p. 208.

Scoville, Wilbur L.: Of 27 assays in the past 6 to 10 years, 12 were below 0.55 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1341.

Mann, E. W.: A parcel of foreign grown aconite, containing a good proportion of stem-crowned roots, yielded 0.51 per cent of total ether soluble alkaloid.—*Ann. Rep. Scuthall Bros. & Barclay*, 1912, 1913, p. 5.

Dohme and Engelhardt: No matter how carefully extract of aconite is prepared, a deterioration of the alkaloids is liable to take place, and the physiological strength consequently is largely reduced. It should never be prepared.—*J. Am. Assoc.* 1912, v. 1, p. 598.

Abbott, J. S.: Ten samples of tincture of aconite examined, containing from 0.025 to 0.041 per cent of aconitine, were below standard.—*Rep. F. & D. Com. Texas*, 1912, p. 26.

Cook, Alfred N.: A sample of tincture of aconite examined, assaying 65.33 per cent, was not passed.—*Rep. South Dakota F. & D. Com.* 1912, p. 50.

Havenhill, L. D.: Eight of the 11 samples of tincture of aconite examined deviated materially from standard.—*Proc. Kansas Pharm. Assoc.* 1912, p. 61.

Tilford, J. Floyd: One sample of tincture of aconite was examined, and was illegal.—*Rep. Kansas Bd. Health*, 1912, p. 113.

Rudolf and Cole: The tincture of aconite on the market is usually inert. Even when the drug is active, small doses seem to have no effect upon the pulse rate.—*Am. J. M. Sc.* 1912, v. 144, p. 788-793.

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Cartier, François: *Aconitum napellus* is perhaps the principal medicament in the treatment of hypertension in the present state of our homœopathic science.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 143.

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Vasterling, P.: Examination of Ph. Germ. V lard and tallow.—*Pharm. Zentralh.* 1912, v. 53, p. 1117-1129.

Metzger, Jesser and Hepp: The detection of beef and of sheep suet in lard, with a report of experimental observations tabulated for comparison.—Pharm. Zentralh. 1912, v. 53, p. 99–113, 128–132.

Delluc, G.: The adulterations of lard by olive oil, with a table showing the constants of lard and of other fats.—Bull. Soc. pharm. Bordeaux, 1912, v. 52, p. 198–200.

Witte, H.: Lard with additions of tallow; 2 samples showed low iodine number and stearin crystals.—Ztschr. öffentl. Chem. 1912, v. 18, p. 309–310.

Allen, R. M.: Much of the "lard" is not lard, but is composed of cotton seed oil and beef stearin.—Circ. Kentucky Agric. Exper. Sta. 1912, January 20, p. 2.

De Barr, Edwin: The greater part of the lard on the market is the fat rendered from the back, head, and trimmings. There is but a limited amount of lard that may be classed as leaf lard on the market.—Rep. Oklahoma P. H. Dept. 1912, p. 429.

Ladd, E. F.: Thus far none of the large packers of lard have indicated any disposition to comply with the requirements of the North Dakota law concerning lard and lard substitutes.—Bull. North Dakota, Agric. Exper. Sta. v. 2, p. 58.

Table showing some of the analytical results reported for lard.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	22	3	Rep. Indiana Bd. Health, 1911, 1912, p. 251.
Caspari, Chas., jr.	96	20	Rep. Food & Drug Com. Maryland, 1911, Baltimore, 1913, p. 15.
Do.	72	0	Rep. Food & Drug Com. Maryland, 1912, Baltimore, 1913, p. 15.
De Barr, Edwin.	14	6	Rep. Oklahoma P. H. Dept. 1912, p. 429.
Halverson, J. O.	3	3	Bull. Dept. F. & D. Inspec. Missouri, 1912, v. 4, p. 5.
Klueter, Harry.	5	1	Rep. Wisconsin D. & F. Com. 1912, p. 106.
Lynch, R. L.	32	14	Rep. Com. District of Columbia, 1912, Washington, 1913, p. 65.
Strode, Sylvanus E.	21	6	Rep. Ohio Dairy & Food Com. 1912, 1913, p. 79.

ADEPS BENZOINATUS.

Ladd, E. F.: Benzoinated lard has been taken up at about one hundred drug stores in the State, and in a majority of cases has been found unsatisfactory, and in many instances unfit for use.—North Dakota Pharm. Assoc. 1912, p. 72. Also Northwestern Drug. 1912, v. 13, Aug. p. 63.

Ladd, E. F.: Of 73 samples of benzoinated lard, 32 were not passed.—Bull. North Dakota Agric. Exper. Sta. 1912, v. 2, No. 7, p. 113–116.

ADEPS LANÆ.

Marcusson and v. Skopnik: The distillation products of wool fat, with a report on ointment like wool fat distillates of French and

English origin.—*Ztschr. ang. Chem.* 1912, v. 25, p. 2577–2580.

Unna, Eugen: Through the method of cleansing used for the adeps lanæ of the Pharmacopœia, we lose its most important constituent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 675.

ADEPS LANÆ HYDROSUS.

Mindes, J.: A smooth ointment is obtained by mixing adeps lanæ, 70, water, 20, and sesame oil, 10 parts.—*Ztschr. allg. österr. Apoth.-Ver.* 1912, v. 50, p. 21.

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Rosengarten, George D.: Note on the determination of the specific gravity of ethyl ether, U. S. P., with an illustration of the apparatus used.—*Am. J. Pharm.* 1912, v. 84, p. 398–399.

Smith, Carl E.: Attempts to cause ether to boil in a test tube by means of the warmth of the hand are seldom successful. This test should be omitted and the boiling point determined in the regular manner.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 527.

Baskerville, Charles: Ethyl ether by catalysis.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 25, p. 327–330.

Fritsche, Paul: The production of ether from ethylene and sulphuric acid.—*Chem. Ind.* 1912, v. 35, p. 637–644.

Baskerville, Charles: The chemistry of inhalation anæsthetics; the main objectionable constituent in ether is acetaldehyde.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 157–177. See also *J. Am. M. Assoc.* 1912, v. 59, pp. 1837–1841.

Lefeldt, M.: Two samples of ether for narcosis did not comply with the Ph. Germ. V test for aldehyde with Nessler's reagent. Ether for narcosis should be frequently renewed as the product, even in well-sealed containers, will deteriorate.—*Pharm. Ztg.* 1912, v. 57, p. 371.

Gehe & Co.: In France samples of ether for narcosis have been found to contain acetone and formaldehyde. They were probably prepared from denatured alcohol.—*Handelsbericht*, 1912, p. 112.

Wijnne, A. J.: Reports on four samples of ether, one of which did not comply with the requirements of the Pharmacopœia.—*Pharm. Weekblad*, 1912, v. 49, p. 204.

Tyrer and Gosling: The compilers of the B. P. C. have neglected to take note of the solubility of ether in water, in giving a test for excessive alcohol, the test being merely a copy of that of the Ph. Brit.—*Pharm. J.* 1912, v. 89, p. 157. See also *Chem. & Drug.* 1912, v. 81, p. 204.

Bennett, Reginald R.: The solubility of ether in normal saline solution.—*Pharm. J.* 1912, v. 89, p. 146. For discussion see p. 175. Also *Year-Book of Pharmacy*, 1912, p. 486.

Doolittle, R. E.: Ether, specified chemically pure, contained non-volatile matter and peroxides.—Ann. Rep. U. S. Dept. Agric. 1912, Washington, 1913, p. 570.

Oediger, W.: A sample of ether was found to contain hydrogen peroxide and did not comply with the official requirements for specific gravity.—Apoth.-Ztg. 1912, v. 27, p. 166.

Wester, D. H.: Samples of ether were found to give a strong reaction of H_2O_2 .—Pharm. Weekblad, 1912, v. 49, p. 402.

Kassner, George: A contribution to our knowledge of ether. An investigation of an explosion of ether, thought to be due to the presence of peroxide.—Arch. Pharm. 1912, v. 250, p. 436-447.

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Buxton, Dudley W.: Crawford Williamson Long, the pioneer of anæsthesia.—Lancet, 1912, v. 182, p. 669-673, 816-818. See also editorial, p. 660.

Hellman, Alfred: Anæsthetics in the Borough of Manhattan. Ether is the favorite anæsthetic at all the hospitals; about equally divided between the Bennet inhaler and the open method.—N. York M. J. 1912, v. 95, p. 1146-1148.

Sanders, Harold A.: The drop method of administering ether, with special reference to a new combination inhaler; illustrated.—N. York M. J. 1912, v. 95, p. 1144-1146.

Acomb, L. Ernest: Illustrated description of a continuous drop bottle for the administration of ether by the open method.—Brit. M. J. 1912, v. 2, p. 1315. Also Lancet, 1912, v. 183, p. 317.

Pinneo, Frank Wilcox: A new regulating dropper for ether or chloroform, usable on any container.—J. Am. M. Assoc. 1912, v. 59, p. 877.

Prudden, C. E.: Modification of the Ferguson open drop method ether inhaler, and mode of etherization; illustrated.—J. Am. M. Assoc. 1912, v. 59, p. 1870-1872.

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Schlesinger, E. G.: The intravenous method of giving anæsthetic drugs has a very definite but limited application.—Lancet, 1912, v. 183, p. 1220.

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Githens and Meltzer: Differences in the toxic effects of ether and chloroform, as observed under intratracheal insufflation. (Abstract.)—*J. Pharmacol. & Exper. Therap.* 1912-13, v. 4, p. 355-356.

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	Exam-ined.	Re-jected.	
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Diekman, George C.....	10	5	Proc. New York Pharm. Assoc. 1912, p. 132.
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ALUMINI SULPHAS.

Smith, Carl E.: This salt crystallizes with varying quantities of water under different conditions. the salt of the market sometimes containing more, sometimes less than 16 molecules.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 529.

Crabbé, Maurice: The Ph. Belg. description should include the requirement that aluminium sulphate contain 99.5 per cent of pure aluminium sulphate and correspond to the formula, $\text{Al}_2(\text{SO}_4)_3 \cdot 16\text{H}_2\text{O}$ (instead of $18\text{H}_2\text{O}$).—*J. pharm. Anvers*, 1912, v. 68, p. 605.

Schneider, A.: The testing of aluminium sulphate for free sulphuric acid, according to the Ph. Germ. V.—*Pharm. Zentralh.* 1912, v. 53, p. 1205–1206.

Carter, Shackleton and Grafton: U. S. Pat. 1,037,591, Sept. 3, 1912. Process of making aluminium sulphate.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 922.

AMMONII BENZOAS.

Smith, Carl E.: For pharmacopœial purposes it is probably sufficient to titrate the free benzoic acid in a water solution of the salt, with litmus as indicator.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 529.

AMMONIUM BIFLUORIDE.

Anon.: According to the New York Branch of the A. Ph. A., ammonium bifluoride is used but little, and then often with bad results.—*Drug Topics*, 1912, v. 27, p. 35.

Anon.: Fluoram, a proprietary title for ammonium bifluoride recommended by Pailliotin for use in dentistry.—*Apoth.-Ztg.* 1912, v. 27, p. 911.

AMMONII BROMIDUM.

Smith, Carl E.: Ammonium bromide does not volatilize "completely," but should leave not more than 0.05 per cent of residue, when heated. A test for bromate is unnecessary.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 529.

AMMONIUM CARBONATE.

Brown, Linwood A.: The U. S. P. ammonium carbonate is of variable composition and difficult to keep. Ammonium bicarbonate, which is very much more stable, could be used in place of the present carbonate to advantage.—*Am. J. Pharm.* 1912, v. 84, p. 7–14.

Smith, Carl E.: Market products contain from 27 to 31 per cent of ammonia; the U. S. P. standard of at least 31.58 per cent is seldom reached.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 529.

Burrows and Lewis: The equilibrium between ammonium carbonate and ammonium carbamate in aqueous solution at 25°.—*J. Am. Chem. Soc.* 1912, v. 34, p. 993–995.

For records of patents see: *J. Soc. Chem. Ind.* 1912, v. 31, p. 335, 1115, 1125.

Brown, Linwood A.: Fourteen samples analyzed, varying from 60.66 to 94.73 per cent; not one met the U. S. P. standard.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 47.

Scoville, W. L.: Several lots were below 90 per cent pure. It usually runs low.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 372.

Patch, E. L.: Samples of ammonium carbonate tested from 92 to 96 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 372.

Mann, E. W.: The percentage of official salt present in chemical ammonium carbonate ranged from 96.93 to 98.93.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 37.

Osborne, Oliver T.: As an expectorant, ammonium carbonate is too irritant and is not needed. If we need a cardiac stimulant of the ammonia type, the aromatic spirit of ammonia is better.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

AMMONII CHLORIDUM.

Smith, Carl E.: While nominally allowing 0.05 per cent of impurities, the U. S. P. gives tests which exclude any salt less than 99.9 per cent pure.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 529.

J. D. Riedel, A.-G.: Ammonium chloride always contains an appreciable amount of nonvolatile material.—*Riedel's Berichte* (1912), p. 38. See also *Südd. Apoth.-Ztg.* 1912, v. 52, p. 182.

Freeth and Cocksedge: U. S. Pat. 1,035,696, Aug. 13, 1912. Process of making pure ammonium chloride. See Eng. Pat. 86 of 1910.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 817.

Oediger, W.: A sample of ammonium chloride was found to contain sulphates.—*Apoth.-Ztg.* 1912, v. 27, p. 166.

Farquhar, G. S.: Chloride of ammonium, according to its mode of employment, is refrigerant, laxative, expectorant, diaphoretic, and diuretic.—*Ellingwood's Therap.* 1912, v. 6, p. 54-55.

Bates, W. A.: In the treatment of rhus poisoning, a solution of ammonium chloride, 2 to 4 ounces to 1 quart of water with cloths wetted therewith every 1 to 3 hours.—*Am. J. Clin. Med.* 1912, v. 19, p. 753.

AMMONIUM HYPOPHOSPHITE.

Beringer, Geo. M.: A proposed N. F. monograph for ammonium hypophosphite, which is required to be not less than 97.5 per cent pure.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 68.

AMMONII IODIDUM.

Needham, R. H.: A very deliquescent salt, almost impossible to keep in a crystalline form, used once in a great while in place of potassium iodide and in liniments.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1347.

AMMONII SALICYLAS.

Smith, Carl E.: With much care a salt can be made having a slightly alkaline reaction, but unless perfectly dry and kept in full, tightly stoppered containers, it soon loses enough ammonia to acquire an acid reaction.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 529.

AMYGDALA AMARA.

Ax, F.: A sample of amygdala amara was found to be largely worm eaten.—*Apoth.-Ztg.* 1912, v. 27, p. 149.

Rosenthaler, L.: The distribution of the amygdalina, with observations on the physical and chemical constants of the amygdalins occurring in various seeds of the genus amygdala.—*Arch. Pharm.* 1912, v. 250, p. 298-301.

Compton, Arthur: Note on the decomposition of amygdalin and vicianin by enzyme action.—*Chem. News*, 1912, v. 106, p. 163.

AMYLIS NITRIS.

Smith, Carl F.: Amyl nitrite should be required to distil completely at a temperature not exceeding 110°, to exclude objectionable impurities, such as amyl nitrate and nitropentane.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 530.

Mindes, J.: When 5 drops of amyl nitrite are layered with 10 drops of chloroform, 1 drop of tincture of iodine, and 2 or 3 cc. of water the lower mixture becomes dark red and the water remains uncolored. On the addition of from 2 to 3 cc. of alcohol the mixture becomes orange, and on the addition of zinc iodide starch solution dark green.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 93.

Mann, E. W.: Two of the four samples of amyl nitrite examined during the year were rejected on account of failure to comply with official tests, the specific gravity in each case being high.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 38.

McNaughton, J. G.: Report of successful results from the use of amyl nitrite in severe dyspnoea due to cardiac displacement.—*Brit. M. J.* 1912, v. 2, p. 181.

Cartier, François: The effect of amyl nitrite inhalations is almost instantaneous.—*J. Am. Inst. Homœop.* 1911-12, v. 4, p. 371.

AMYLUM.

Guilliermond, A.: Certain new observations on the mode of formation of starch in the vegetable cell.—*Compt. rend. Soc. Biol.* 1912, v. 72, p. 276-279.

Clark, Ernest D.: The origin and significance of starch.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 19, p. 55-69.

Traquair, John: The starch industry of Great Britain.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 1016-1018.

Hambden, Buel.: A study of some of the physical properties of starches.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 13, p. 63-76. See also Herles, Franz, v. 26, p. 5-10; and Porst and Crown: p. 13-16.

Hartwich and Wichmann: Observations on starch grains and on the counting chamber as an aid to the quantitative determination of the adulterations of vegetable powders.—*Arch. Pharm.* 1912, v. 250, p. 452.

Duryea, Chester B.: Some special aspects of starch.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 13, p. 125-129.

Gruzewska, Z.: A contribution to the study of starch, amylose, and amylopectine, the separation of the 2 constituents of the starch grain and their principal characters.—*J. physiol. et path. gén.* 1912, v. 14, p. 7-18, 32-41.

Kraemer, Henry: The influence of heat and chemicals on the starch grain.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 17, p. 31-35.

Frankforter, G. B.: The chemistry of starch.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 13, p. 133-145.

Malfitano and Moschkoff: The dextrinization of starch by desiccation.—*Comp. rend. Acad. sc.* 1912, v. 154, p. 443-446.

Parow, E.: The production and utilization of dextrins.—*Eight Internat. Cong. Appl. Chem.* 1912, v. 26, p. 11-12. See also Baurer, H. F.: v. 13, p. 9-19; and Rolfe, G. W.: v. 13, p. 237-245.

Nyman, Max.: Observations on the gelatinization temperature of starch grains.—*Ztschr. Unters. Nahr. u. Genussm.* 1912, v. 24, p. 673-676.

Fernbach, A.: A new form of soluble starch.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 617.

Rippetoe and Minor: One sample of corn starch examined contained 0.05 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 444.

van Itallie, E. I.: The Ph. Helv. limits the water content of the official varieties of starch to 12 per cent.—*Pharm. Weekblad*, 1912, v. 49, p. 329-330.

Brown, J. Fred.: Method of obviating the formation of lumps in ointments containing glycerin of starch.—*Pharm. J.* 1912, v. 88, p. 444.

ANISUM.

Anon.: Imports into the United States of anise seed during 1910 amounted to 938,957 pounds; in 1911, 1,114,845 pounds.—*Cons. & Tr. Rep.* May 13, 1912, p. 583.

Rusby, H. H.: Anise is extremely liable to contamination with large amounts of stems, gravel, sand, dust, weed seeds, and other impurities.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 504.

Rippetoe and Minor: One sample of anise seed contained 5.85 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 436.

J. D. Riedel, A.-G.: The ash content of anise was found to vary from 5.6 to 8.8 per cent.—*Riedel's Berichte*, 1912, p. 49.

Mann, E. W.: Several samples of anise were found to yield greater amounts of ash than 6 per cent. For 5 samples of good quality and reasonably clean the figures ranged from 6.05 to 8.31 per cent.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 6.

ANTHEMIS.

Gehe & Co.: The available supply of Roman chamomile has again assumed normal proportions.—*Handelsbericht*, 1912, p. 63.

J. D. Reidel, A.-G.: The ash content of anthemis was found to vary from 5.6 to 5.9 per cent.—*Riedel's Berichte*, 1912, p. 51.

ANTIMONII ET POTASSII TARTRAS.

Smith, Carl E.: The limit of arsenic, which was changed in 1907, is by some critics considered too lenient. This impurity is found to be difficult to remove and involves methods of purification that cause partial oxidation of the antimony.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 530.

Jensen, H. R.: The best manufacturers now work to a stringent Bettendorf's test as a standard for arsenic.—*Evans' An. Notes*, No. 7, 1912, p. 9.

Pearson, W. A.: A trial sample contained calcium, chlorides, heavy metals, and assayed only 94 per cent.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 168.

ANTIPYRINA.

Glücksman, C.: Our knowledge of the synthesis of antipyrine; a didactic study.—*Pharm. Praxis*, 1912, v. 11, p. 457-465, 521-526.

Smith, Carl E.: Market samples examined during two years past, while otherwise conforming to all U. S. P. requirements, had melting points ranging between 105° and 113°.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 530.

Wester, D. H.: Antipyrine was found to melt at from 110° to 111°.—*Pharm. Weekblad*, 1912, v. 49, p. 403.

Wijne, A. J.: One sample of antipyrine melted at from 110° to 112°, in place of 113°, required by the Ph. Helv. IV.—*Pharm. Weekblad*, 1912, v. 49, p. 204.

Anon.: The Ph. Japon. now permits a melting range of 111° to 113°; 0.5 gm. of the material should not leave a weighable residue on incineration.—*Pharm. Ztg.* 1912, v. 57, p. 307.

Aubouy, P.: The Ph. Fr. V method for the determination of antipyrine as iodoantipyrine presents certain peculiarities which render

the results uncertain. A modification of the method is outlined.—*Bull. Pharm. Sud-Est*, 1912, v. 17, p. 405.

Putt, Earl B.: Some microchemical tests for antipyrine; with illustrations.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 511.

Mindes, J.: The green solution, produced by adding 2 drops of fuming nitric acid to 2 cc. of a 1 per cent solution of antipyrine, becomes red on the further addition of fuming nitric acid.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 93.

Kloeman, L.: Report of experimental observations on the action of antipyrine on the normal gastrointestinal tract of dogs.—*Ztschr. physiol. Chem.* 1912, v. 80, p. 26.

Puccinini, Guido M.: The gases of the blood during the administration of antipyrine, phenactin, and antifebrin diminish the total oxygen of the blood circulating in the arteries.—*Arch. Internat. Pharm. et Thérap.*, 1912, v. 22, p. 27-47.

APIOL.

Anon.: The importation of parsley seed into the United States during 1910 amounted to 74,601 pounds; 1911, 75,427 pounds.—*Cons. & Tr. Rep.* May 13, 1912, p. 583.

Chevalier, J.: The official apiol is found in certain parsleys of Germany, but not in quantity at least in the parsleys of France.—*Nouv. remèdes*, 1912, v. 29, p. 303-306.

Editorial: Apiol as found in commerce is very variable in character. The specific gravity as given by the B. P. C., 1.095 to 1.107, is incorrect if the apiol is made according to the method therein described.—*Pharm. J.* 1912, v. 89, p. 340.

Pearson, W. A.: All but one of four samples examined when mixed with ten times their volume of alcohol formed considerable deposits, and only one sample mixed clear with four volumes of olive oil.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 168.

Patch, E. L.: Apiol occurs adulterated with castor oil, glycerol, gurjun balsam, and a residue from the solvent used in extracting the apiol.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 372.

Lutz and Oudin: Observations on the characters and adulterants of liquid apiol.—*Ann. falsif.* 1912, v. 5, p. 343-349.

APOCYNUM.

Needham, R. H.: Apocynum may be a good diuretic, but it is nowhere near digitalis when it comes to prescriptions and the treatment of diseases requiring a diuretic and heart stimulant.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1346.

Thomas, R. L.: It seems that this drug yields its properties better to a decoction than an alcoholic preparation.—*Nat. Eclect. M. Assoc. Quart.* 1912-1913, v. 4, p. 133.

Lloyd, John Uri: The reputation of apocynum was made by the aqueous preparation, and we must not forget that by the simple method of decoction or infusion you can sometimes accomplish what you can not in any other way.—*Nat. Eclect. M. Assoc. Quart.* 1912, 1913, v. 4, p. 133.

Cartier, François: Apocynum cannabinum is a diuretic. Recent physiological experiments class it among the cardiac medicaments.—*J. Am. Inst. Homœop.* 1911–1912, v. 4, p. 145–146.

Ruble, W. R.: Apocynum is a good remedy even where the other indications for it are absent in either acute or chronic inflammation of the kidneys.—*Eclectic M. J.* 1912, v. 72, p. 390.

Moerke, A. C.: Apocynum is the remedy in dropsy and a vegetable trocar when used in the right cases.—*Ellingwood's Therap.* 1912, v. 6, p. 411–412.

APOMORPHINÆ HYDROCHLORIDUM.

Smith, Carl E.: Commercial apomorphine hydrochloride is not anhydrous, but contains $\frac{1}{2}$ molecule (2.89 per cent) of crystal water, which it loses over sulphuric acid and regains on exposure to the air.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 530.

Patch, E. L.: Comment on the differences between the crystalline and amorphous salts, with tabulated comparison of tests.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 372.

Melville, E. F.: New therapeutic doses of an old remedy; gallstone, eclampsia, persistent vomiting, alcoholism, etc.—*Am. J. Clin. Med.* 1912, v. 19, p. 421.

Chapman, J. J.: Apomorphine is the thing in eclampsia.—*Am. J. Clin. Med.* 1912, v. 19, p. 934.

AQUÆ.

Forret, J. A.: The relative merits of distillation and simple solution of the oil in the preparation of aromatic waters.—*Pharm. J.* 1912, v. 88, p. 100.

Utech, P. Henry: Many of the aromatic medicated waters may be prepared by simple agitation of the oil with hot water, allowing the same to stand for several days or weeks as the case may be.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 475.

Havenhill, L. D.: Considerable complaint is heard concerning the use of purified talc as a distributing agent in the preparation of the aromatic waters.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 859.

Blair, Henry C.: While theoretically the pharmacist should make all possible medicated waters, there are exceptions. Rose water, orange flower water and cherry laurel water, for instance can be made advantageously only from the fresh material.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 18.

AQUA.

Houston, A. C.: The varieties and significance of *B. coli* in water supplies.—*Brit. M. J.* 1912, v. 2, p. 704-716. See also editorial, p. 735.

Sammis, J. L.: A simple method for purifying drinking water by pasteurization; with illustrations.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 681-682.

Müller, Arno.: The sterilization of water by means of ultraviolet rays.—*Arb. k. Gsundheitsamte.* 1912-1913, v. 43, p. 475-482.

Rouquette, E.: The sterilization of potable water by the action of ozone and chlorine compounds in the nascent state.—*Compt. rend. Acad. sc.* 1912, v. 154, p. 447-450.

Bruns: The disinfection of potable water by means of chlorinated lime.—*Chem. Ztg.* 1912, v. 36, p. 920.

Bartow, Edward: Examples of the efficiency of calcium hypochlorite in treating turbid waters.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 16, p. 7-10. See also Jennings, C. A., v. 26, p. 215-239.

Lederer and Bachman: Some interesting observations on the disinfection of lake water with calcium hypochlorite.—*Chem. Eng.* 1912, v. 16, p. 215-221.

Race, Joseph: The treatment of water with chlorine.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 611-616. See also Spillner, *Pharm. Post.* 1912, v. 45, p. 806.

Hungerford, Churchill: Water filtration for industrial purposes.—*Chem. Eng.* 1912, v. 15, p. 237-243.

Royal-Dawson, H.: Water purification and its application to industrial uses.—*Chem. Eng.* 1912, v. 16, p. 185-188.

Kellerman, Karl F.: The rational use of disinfectants and algicides in municipal water supplies.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 26, p. 241-245.

Hinard, H.: On the sterilization of potable waters.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 16, p. 11-15.

Denigès, G.: A book review of a monograph on potable waters by A. Dané.—*Bull. Soc. pharm. Bordeaux*, 1912, v. 52, p. 51-52.

Hamor, W. A.: The purification and softening of water by permutite, an artificial zeolite.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 240-241.

Huizinga, Alida: The determination of nitrate and nitrite nitrogen in water according to the method proposed by v. Schlösing.—*Ztschr. anal. Chem.* 1912, v. 51, p. 273-292.

Houstoun, R. A.: The mechanics of the water molecule.—*Proc. Roy. Soc. Lond.* 1912, v. 86, p. 102-105.

König, F.: On the quantitative determination of iron in water.—*Apoth. Ztg.* 1912, v. 27, p. 536-537.

Meerburg, P. A.: On the lead dissolving properties of drinking water.—*Chem. Weekblad*, 1912, v. 9, p. 494-497.

Walker and Kay: The acidity and alkalinity of natural waters.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 1013-1016.

Utz: A review of the progress in the chemistry of water.—*Pharm. Praxis*, 1912, v. 11, p. 352-356.

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Bernthsen, H. A.: Synthetic ammonia; its production directly from a combination of nitrogen and hydrogen.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 27, p. 182-202. See also *J. Ind. & Eng. Chem.* 1912, v. 4, p. 760-767, and *Sc. Am. Suppl.* 1912, v. 74, p. 386-387, 410-411.

v. Kéler, H.: A review of progress in the production of ammonia and of its salts.—*Ztschr. ang. Chem.* 1912, v. 25, p. 521-525.

Sulzer, H.: A method for the production of ammonia and formic acid from calcium cyanamine.—*Ztschr. ang. Chem.* 1912, v. 25, p. 1268-1273.

Hilgenstock, R. W.: The manufacture of aqua ammonia and of sal ammoniac direct from raw gas liquor, with illustrations.—*Chem. Eng.* 1912, v. 15, p. 195-201.

For record of patents see *J. Soc. Chem. Ind.* 1912, v. 31.

Smith, Carl E.: Appreciable amounts of ammonia will be volatilized and results found too low, when the U. S. P. directions for the assay are followed.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 530.

Bernegau and E'Ve: The official method of weighing and titrating ammonia water is inconvenient and subjects the sample to possible loss by volatilization.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 123.

Wöhlk, Alfred: Tests for pyridin in ammonia water and in salts of ammonia.—*Arch. Farm. og Chem.* 1912, v. 19, p. 221-224. See also *Ber. pharm. Gesellsch.* 1912, v. 22, p. 285-288.

Anon.: An illustrated description of a distilling battery for the determination of ammonia.—*Pharm. Ztg.* 1912, v. 57, p. 535.

Reinders and Cats: The oxidation of ammonia to oxides of nitrogen.—*Chem. Weekblad*, 1912, v. 9, p. 47-58.

Jorissen, W. P.: The oxidation of ammonia in aqueous solutions.—*Chem. Weekblad*, 1912, v. 9, p. 58-60.

Editorial Note: Regulation as to labeling, etc., of liquid ammonia preparations containing more than 5 per cent by weight of free ammonia.—*Pharm. J.* 1912, v. 88, p. 87.

Grafe, Eduard: On the action of ammonia and of ammonia derivatives on the oxidation processes in cells.—*Ztschr. physiol. Chem.* 1912, v. 79, p. 421-438.

Emery, J. Q.: The ammonia water examined was deficient in the active principle.—*Rep. Wisconsin D. & F. Com.*, 1912, p. 25.

Wulling, Frederick J.: Ammonia water assay yielded 5.30 to 13.32 per cent by weight of NH_3 .—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1122.

Abbott, J. S.: "Household ammonia" is a fraud name.—Rep. Texas F. & D. Com. 1912, p. 21.

Table showing some of the analytical results reported for ammonia water.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, Linwood A.	6	2	Proc. Kentucky Pharm. Assoc. 1912, p. 47.
Klueter, Harry	10	7	Rep. Wisconsin D. & F. Com. 1912, p. 60.
Tilford, J. Floyd	1	1	Rep. Kansas Bd. Health, 1912, p. 113.
Wester, D. H.	2	1	Pharm. Weekblad, 1912, v. 49, p. 403.

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AQUA AMMONIÆ FORTIOR.

Oediger, W.: A sample of stronger ammonia water was found to contain coal tar bases.—Apoth.-Ztg. 1912, v. 27, p. 166.

Wulling, Frederick J.: Assay of stronger ammonia water yielded 23.00 to 26.20 per cent of NH_3 . The sample assaying 23 per cent was taken from a freshly opened carboy.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1122.

AQUA AURANTII FLORUM.

Dück: A sample of orange flower water contained a heavy metal and was weak in odor.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 515.

AQUA DESTILLATA.

Derlin, L.: The Ph. Germ. V requirements for distilled water are criticized.—Apoth.-Ztg. 1912, v. 27, p. 83.

Allen, W. H.: Distilled water as a by-product from the condensed steam in artificial ice factories will answer the requirements of the U. S. P.—J. Am. Pharm. Assoc. 1912, v. 1, p. 864.

Cook, Alfred N.: A sample of "distilled water" was found to be highly charged with minerals. It appears to be ordinary well water.—Bull. South Dakota F. & D. Dept. 1911, No. 24, p. 4.

Müller, Paul Th.: Samples of distilled water obtained from 16 pharmacies in Graz were found to contain in each one cc. from 68,000 to 6,050,000 microorganisms.—(Münch. Med. Wehnschr. 1911, 2739) Pharm. Zentralh. 1912, v. 53, p. 10.

Rebière, G.: The microscopic fauna and flora of distilled water.—J. Pharm. et chim. 1912, v. 5, p. 490–493. See also Rev. Am. Farm. y Med. 1911–1912, v. 16, June, p. 18–19.

Bonsfield, William Robert: The continuous fractional distillation of water; illustrated.—*J. Chem. Soc. Lond.* 1912, v. 101, p. 1443-1453.

McCune, W. H.: U. S. Patent No. 1,010,508. A self cleaning still for the production of distilled water.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 73.

Cook, Alfred N.: Of 9 samples of distilled water examined, 3 were not passed.—*Rep. South Dakota F. & D. Com.* 1912, p. 50.

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Jordan, C. B.: Historical note on the introduction of hydrogen peroxide, together with a discussion of its keeping properties.—*Proc. Indiana Pharm. Assoc.* 1912, p. 58-65.

Brewer, J. S.: A review of the history of the product and a discussion of the process of manufacture, properties, impurities, and preservatives of hydrogen peroxide.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1002-1012.

Richter, R.: The production and properties of hydrogen peroxide, with the Ph. Germ. V requirements.—*Pharm. Zentralh.* 1912, v. 53, p. 746-749.

de Hemptinne A.: On the synthesis of hydrogen peroxide.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 230. See also Fischer and Wolf, p. 851-852.

Dohme and Engelhardt: The method for determining the acidity should be revised.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 599.

Smith, Carl E.: Determination of acidity by direct titration is not reliable. The U. S. P. method is to be preferred. The test for hydrofluoric acid is not delicate enough to prove "absence," but is sufficiently so to exclude objectionable quantities.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 531.

Derlin, L.: A sample of hydrogen peroxide was found to contain an excess of phosphoric acid. The preparation when tested with solution of sodium acetate in excess gave a turbidity suggestive of oxalic acid.—*Apoth.-Ztg.* 1912, v. 27, p. 806.

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Howard, Charles D.: Hydrogen peroxide, however prepared, is not permanent and should not be stocked for longer than 6 months by the retailer.—Bull. New Hampshire Bd. Health, 1912, v. 1, p. 47-48.

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Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.....	40	16	Rep. Indiana Bd. Health, 1911, 1912, p. 274.
Bernegau, L. H.....	826	24	Proc. Pennsylvania Pharm. Assoc. 1912, p. 172.
Brown, Linwood A.....	52	10	Proc. Kentucky Pharm. Assoc. 1912, p. 49.
Cook, Alfred N.....	8	1	Rep. South Dakota F. & D. Com. 1912, p. 50.
Emery, J. Q.....	1	1	Rep. Wisconsin D. & F. Com. 1912, p. 25.
Ford, Chas. M.....	2	2	Bull. Colorado Bd. Health, 1911, v. 11, December, p. 5.
Havenhill, L. D.....	20	1	Proc. Kansas Pharm. Assoc. 1912, p. 61.
Howard, Chas. D.....	40	23	Rep. New Hampshire Bd. Health, 1912, p. 171.
Marcelet, H.....	6	6	Bull. Pharm. Sud-Est, 1912, v. 17, p. 532.
Oediger, W.....	1	1	Apoth. Ztg. 1912, v. 27, p. 166.
Strode, Sylvanus E.....	7	1	Ann. Rep. Ohio D. & F. Com. 1911, 1912, p. 65.
Tilford, J. Floyd.....	21	3	Rep. Kansas Bd. Health, 1912, p. 113.
Wester, D. H.....	2	1	Pharm. Weekblad, 1912, v. 49, p. 407.

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Smith, F. A.: Hydrogen peroxide can be ranked among the most useful drugs in the Pharmacopœia.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 841.

Hobby, A. W.: Peroxide of hydrogen as a throat or nasal wash is dangerous, being almost certain to carry the infection into the more delicate cavities, the middle ear or the maxillary sinuses.—*Eclectic M. J.* 1912, v. 72, p. 134.

Stewart, Douglas H.: Peroxide of hydrogen is more or less inert in dental practice, because it can not penetrate a cell wall in the acid solution commonly used in the mouth. This may be corrected by introducing sodium into the solution.—*Dental Cosmos*, 1912, v. 54, p. 425-426.

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Smith, Carl E.: In the test for lead, the mixture with sulphuric acid must be kept hot to prevent crystallization of silver sulphate, which may be mistaken for lead sulphate. The test for foreign salts may give misleading results, unless precautions are taken.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 531.

Patch, E. L.: Five celluloid ampoules of silver nitrate lost 0.377 gm. in weight in 1 month, or 0.075 gm. for each ampoule.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

Brown, Linwood, A.: Two samples of fused silver nitrate did not contain any silver chloride, as required by U. S. P.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 50.

Robinson, Wm. J.: A case of silver nitrate urethritis.—*Critic and Guide*, 1912, v. 15, p. 108–111.

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Wijnne, A. J.: One sample of silver proteinate sold as containing 8.3 per cent of silver was found to contain 8.09 per cent, when estimated by the Volhard method.—*Pharm. Weekblad*, 1912, v. 49, p. 204.

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Wells, G. Harlan: There are few remedies that have a wider range of applicability in chronic cardiac diseases than the iodide of arsenic.—Hahnemann. Month. 1912, v. 47, p. 267.

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Smith, Carl E.: Arsenic trioxide should contain not more than 0.1 per cent of nonvolatile matter. Commercial products often contain over 1 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 531.

Editorial: Drug examinations by the Government chemist show that the high standard of purity in respect of arsenic now required is not always kept in view by manufacturers.—*Pharm. J.* 1912, v. 89, p. 365.

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Bernegau, L. H.: Twelve samples assayed from 99.3 to 99.98 per cent As_2O_3 . Three samples were below standard.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 168.

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to contain from 0.14 to 0.28 grain to the gallon.—Med. Rec. 1912, v. 81, p. 207.

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Table showing some of the analytical results reported for asafetida.

Reporters.	Number of samples—		References.
	Exam-ined.	Not U. S. P.	
Bernegau, L. H.	40	30	<i>Proc. Pennsylvania Pharm. Assoc.</i> 1912, p. 168.
Brown, Linwood A.	41	34	<i>Proc. Kentucky Pharm. Assoc.</i> 1912, p. 47.
Caesar & Loretz.	7	5	<i>Jahres-Ber.</i> 1912, p. 102.
Be Barr, Edwin.	3	3	<i>Rep. Oklahoma P. H. Dept.</i> 1912, p. 465.
Dohme and Engelhardt.	119	90	<i>J. Am. Pharm. Assoc.</i> 1912, v. 1, p. 100.
Harrison and Self.	9	3	<i>Chem. & Drug.</i> 1912, v. 81, p. 202.
Patch, E. L.	5	5	<i>J. Am. Pharm. Assoc.</i> 1912, v. 1, p. 373.
Pearson, W. A.	5	5	<i>Proc. Pennsylvania Pharm. Assoc.</i> 1912, p. 167.
Potter, Hubert F.	10	10	<i>Rep. Connecticut Dairy & Food Com.</i> 1912, p. 37.
Street, John Phillips.	17	15	<i>Rep. Connecticut Agric. Exper. Sta.</i> 1912, p. 208.

Seoville, W. L.: Thirty-eight lots varied from 21.6 per cent to 61.2 per cent soluble in alcohol. One lot gave over 50 per cent of ash and several lots above 40 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 372.

Gane, E. H.: The high percentage of impurity in the commercial article renders necessary a process of purification.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 372.

Koenig, Paul: The varied uses for asafetida in Egypt. It is one of the popular remedies for increasing the weight of females and is generally believed to be valuable as an insecticide.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 497.

Osborne, Oliver T.: The advantage derived from an asafetida or a valerian is probably either from the alcohol contained in many of their preparations, or else is psychic, from the disagreeableness of the odor.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.* and *Chem. Zentralbl.*

ASPIDIUM.

Havenhill, L. D.: Much of the male fern of the market does not conform to the U. S. P. description. It is very largely composed of

"fingers" which, it is understood, are the peeled stipe bases.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 860.

J. D. Riedel, A.-G.: The ash content of aspidium was found to vary from 2.2 to 3.2 per cent; amount of insoluble ash to 0.5 per cent.—*Riedel's Berichte*, 1912, p. 50.

Goris and Boisin: A note on the estimation of ethereal extract of male fern and the unification of methods of analysis.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 705-710.

Dohme and Engelhardt: The activity of aspidium depends almost entirely on those substances present in what is generally termed "crude filicin."—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 599.

Caesar & Loretz: Outline of the method for determining the oleo-resin content of aspidium.—*Jahres-Ber.* 1912, p. 150-151.

Mann, E. W.: Of two samples of oleoresin of aspidium examined one proved entirely satisfactory. The second evidently was not a genuine extract.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 14.

Editorial: A sample of cheap extract of male fern examined by Merck, was found to be adulterated by the addition of 25 per cent of castor oil, and contained only about 8 per cent of crude filicin.—*Apothecary*, 1912, v. 24, Jan. p. 14.

Editorial: The occasional cases of poisoning from male fern, when given with castor oil, warrant another warning.—*N. York M. J.* 1912, v. 95, p. 707.

Roberts, H. G.: A prescription made up from an extract of male fern, nine years old, which had gone solid, and was shaken up with ether, proved quite active.—*Pharm. J.* 1912, v. 88, p. 741.

Editorial: Hæmolytic jaundice due to male fern, with reference to two cases reported by Etienne and Perrin.—*Lancet*, 1912, v. 182, p. 939.

ASPIDOSPERMINE.

Solis-Cohen, Solomon: Aspidospermine is a drug whose potency in well selected cases is so great that competent authority has termed it the digitalis of the lungs.—*Am. J. Clin. Med.* 1912, v. 19, p. 1225.

According to the New York Branch of the A. Ph. A., it would be better to make quebracho bark official.—*Drug Topics*, 1912, v. 27, p. 35.

ATROPINA.

Putt, Earl B.: Some microchemical tests for atropine, with illustrations.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 509.

Fuller, H. C.: The Vitali color reaction for atropine can not be relied upon absolutely and in all circumstances.—*Merck's Rep.* 1912, v. 21, p. 206.

Smith, Carl E.: The melting point of many commercial samples varies between 113° and 116°.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 531.

Anon.: A number of cases of atropine poisoning, one of them fatal, in Belgium, were due to the supply by the wholesale druggist of atropine in place of sparteine.—*Chem. & Drug.* 1912, v. 80, p. 4.

Clark, A. J.: The livers of the frog and rabbit, but no other tissues, possess the power of destroying atropine.—*Brit. M. J.* 1912, v. 2, p. 1099–1102.

Metzner, R.: Contribution on the action and retention of atropine in the organism.—*Arch. exper. Path. u. Pharmakol.* 1912, v. 68, p. 110–159.

Metzner and Hedinger: The relation of the thyroid gland to the atropine destroying power of the blood.—*Arch. exper. Path. u. Pharmakol.* 1912, v. 69, p. 272–292.

Coghlan, E. F.: Hypodermic use of atropine, strychnine, and adrenalin, advocated in the treatment of cardiac depression in diphtheria.—*Brit. M. J.* 1912, v. 1, p. 534. See also F. G. Crookshank, p. 669.

Mosenthal, Herman O.: Atropine therapy in diabetes mellitus, with tabulated results.—*J. Am. M. Assoc.*, 1912, v. 58, p. 777.

Umber, F.: The atropine treatment of phosphaturia.—*Therap. Gegenw.* 1912, v. 53, p. 97–98.

Nefe, A. A.: A case of uterine hæmorrhage successfully treated with large doses of atropine.—*Am. J. Clin. Med.* 1912, v. 19, p. 87.

Chase, Sara T.: Atropine is the first thought in acute coryza, in dysenteries and diarrhœas, in hæmorrhage from abortion, and in neuralgias. It seems as though there is no other alkaloid that has such a variety of uses.—*Am. J. Clin. Med.* 1912, v. 19, p. 85.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.* and *Chem. Zentralbl.*

ATROPINÆ SULPHAS.

Dott, D. B.: The question of a formula for atropine sulphate, particularly as to its water content, requires further investigation.—*Pharm. J.* 1912, v. 88, p. 425; also *Chem. & Drug.* 1912, v. 80, p. 527.

Smith, Carl E.: The market product contains about 1 molecule (2.59 per cent) of water of crystallization, but is somewhat efflorescent. The melting point varies greatly with the rate of heating. The presence of hyoscyamine in atropine and its salts is best determined with a polariscope.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 531.

AURANTII AMARI CORTEX.

Rippetoe and Minor: Two samples of bitter orange peel examined contained 3.70 and 4.25 per cent of ash respectively.—*Am. J. Pharm.* 1912, v. 84, p. 442.

J. D. Riedel, A.-G.: The ash content of orange peel was found to vary from 5.3 to 5.5 per cent; amount of insoluble ash to 0.1 per cent.—*Riedel's Berichte*, 1912, p. 49.

The Washington Branch of the A. Ph. A. recommends that elixir of bitter orange be not included in the N. F.—Drug. Circ. 1912, v. 56, p. 158.

AURI ET SODII CHLORIDUM.

Smith, Carl E.: To be certain of complete precipitation of gold, in the assay, it is advisable to add a second portion of a few cc. of hydrogen peroxide solution about half an hour after adding the first portion.—J. Am. Pharm. Assoc. 1912, v. 1, p. 532.

BALSAMUM PERUVIANUM.

Hale, Albert: Balsam of Peru; a Central American contribution to the Pharmacopœia (Bull. Pan American Union).—Am. Perf. 1912–13, v. 7, p. 10, 40.

Tunmamm, O.: The chief source of balsam of Peru is San Salvador. The collection of the balsam begins in November and lasts until May. With care a tree will yield for 30 years.—Apoth.-Ztg. 1912, v. 27, p. 60.

Swain, Robert Lee: *Toluifera pareira* was named after Jonathan Pareira, the English botanist.—Drug. Circ. 1912, v. 56, p. 63.

J. D. Riedel, A.-G.: A sample of balsam from *Myroxylon punctatum* Klotzsch was found to have properties quite different from those of balsam of Peru, the active principles of the latter being absent entirely.—Riedel's Berichte, 1912, p. 33–34.

Caesar & Loretz: Factitious balsam of Peru is not always readily detected. A sample reported on compared favorably with the natural product.—Jahres-Ber. 1912, p. 20–23.

Kebler, L. F.: Imitation balsam of Peru complying with the tests of the Pharmacopœia has been met with.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1405. Also Am. J. Pharm. 1912, v. 84, p. 501.

Rusby, H. H.: The impropriety in the case of balsam of Peru is in the marketing of a purely fictitious manufactured product, an imitation of the natural one.—J. Am. Pharm. Assoc. 1912, v. 1, p. 373.

Byrnes, Garret: A bargain price in balsam of Peru means that we are getting all we pay for, but which our own tests, if we make them, will not prove an artificial substance.—Proc. New Jersey Pharm. Assoc. 1912, p. 89.

Gehe & Co.: An upper limit for the saponification number of balsam of Peru should be included. A drug with a saponification number above 265° is suspicious, this factor being usually in the neighborhood of 250°.—Handelsbericht, 1912, p. 46.

Wolter, F.: Samples of balsam of Peru did not comply with the Ph. Germ. V requirements. The chloral hydrate test is thought to be too stringent.—Pharm. Ztg. 1912, v. 57, p. 472.

J. D. Riedel, A.-G.: For the Ph. Germ. V hydrated chloral test for balsam of Peru absolutely dry hydrated chloral should be used.—Südd. Apoth.-Ztg. 1912, v. 52, p. 182. See also Riedel's Berichte, 1912, p. 38.

Caesar & Loretz: An assay for cinnamein content and an outline of the tests used and the requirements included in the several important pharmacopœias.—Jahres-Ber. 1912, p. 109–111.

Griebel, C.: A reaction for balsam of Peru, the detection of cinnamein.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 24, p. 688.

Lehmann and Müller: On the estimation of cinnamein in balsam of Peru, with an outline of the method proposed.—Arch. Pharm. 1912, v. 250, p. 1–5.

Kroeber, Ludwig: The examination of balsam of Peru.—Apoth.-Ztg. 1912, v. 27, p. 974–975.

Delphin, T.: Tests for balsam of Peru.—Svensk farm. Tidskr. 1912, v. 16, p. 40–42. Also Pharm. Ztg. 1912, v. 57, p. 198.

Anon.: Seven samples of balsam of Peru varied in saponification number from 232.8 to 280.5; in cinnamein content 59.7 to 63.6 per cent; and in the saponification number of the cinnamein from 229 to 257.1—Südd. Apoth.-Ztg. 1912, v. 53, p. 52.

Mann, E. W.: Of four samples of balsam of Peru examined one was undoubtedly adulterated.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 18.

Spindler: Of 9 samples of balsam of Peru, 3 were rejected because of low saponification values. The 3 samples were probably factitious.—Südd. Apoth.-Ztg. 1912, v. 52, p. 11.

Hommell, Philemon E.: A review of the balsam of Peru preparations, with a number of suggested formulas.—Merck's Rep. 1912, v. 21, p. 331.

BALSAMUM TOLUTANUM.

Gehe & Co.: The available supply of balsam of tolu is small and the drug is extremely scarce.—Handelsbericht, 1912, p. 46.

Rippetoe and Minor: Four samples of balsam of tolu contained from 0.30 to 0.54 per cent ash.—Am. J. Pharm. 1912, v. 84, p. 436.

Mann, E. W.: Three of eleven samples of balsam of tolu were evidently adulterated with colophony.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 24.

BELLADONNÆ FOLIA.

Henkel, Alice: Belladonna, a plant growing wild from southern Europe to central Asia, has been frequently cultivated experimentally in the United States.—Drug. Circ. 1912, v. 56, p. 134–135.

Borneman, John A.: Belladonna can readily be grown from the seed, but care must be taken not to bury the seed too deep.—Am. J. Pharm. 1912, v. 84, p. 549.

Mitlacher, Wilhelm: Observations on the cultivation of *Atropa belladonna*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 375.

Ransom and Henderson: Belladonna; the effect of cultivation and fertilization on the growth of the plant and on the alkaloidal content of the leaves.—Eighth Internat. Cong. Appl. Chem. 1912, v. 17, p. 63-68. For discussion see vol. 28, p. 153; also Chem. & Drug. 1912, v. 81, p. 443-444.

Carr, Francis H.: The effect of cultivation upon the alkaloidal content of *A. belladonna*.—Chem. & Drug. 1912, v. 81, p. 432. Also Eighth Internat. Cong. Appl. Chem. v. 17, p. 7-13.

Unger, W.: The variation in the structure and size of belladonna leaves exposed to the sun and those grown in the shade, with several illustrations.—Apoth.-Ztg. 1912, v. 27, p. 763-764.

Swain, Robert Lee: Belladonna is not unlike prima donna in its original meaning, coming as it does from two Latin words meaning "beautiful lady." In earlier days the Roman ladies used this plant to produce an expansion of the pupils of their eyes, thinking that by so doing they were greatly enhancing their personal appearance.—Drug. Circ. 1912, v. 56, p. 64.

Schneider, Albert: Proposed outline of pharmacopœial description of belladonna leaf and herb.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1336-1337.

Sayre, L. E.: The introduction of a description of belladonna into the Pharmacopœia, so as to permit of the use of this drug as now produced in California, is recommended.—J. Am. Pharm. Assoc. 1912, v. 1, p. 239.

Rusby, H. H.: Should the contemplated substitution of the herb for the leaves become official, without any restrictions as to size of stems, considerable trouble will be prepared for analysts.—J. Am. Pharm. Assoc. 1912, v. 1, p. 374.

Vanderkleed, C. E.: Thirteen bales of belladonna leaf contained an excess of stems. Leaf portion assayed 0.298 per cent and the stem portions 0.175 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 374.

Gaze, R.: A review of the varying pharmacopœial requirements for belladonna, hyoseyamus, and stramonium. Several of the pharmacopœias require that these drugs be renewed annually. No justification for this requirement is apparent.—Apoth.-Ztg. 1912, v. 27, p. 402.

Richter, R.: The Ph. Germ. V requires that belladonna leaves be more than 20 centimeters long.—Pharm. Zentralh. 1912, v. 53, p. 502.

Rusby, H. H.: Belladonna leaves may be brown without detriment to their quality.—J. Am. Pharm. Assoc. 1912, v. 1, p. 951.

Gehe & Co.: Better grades of belladonna leaf are extremely scarce and samples of the drug have been found to be adulterated with leaves of *Ailanthus glandulosa*.—Handelsbericht, 1912, p. 72.

Kebler, L. F.: It seems that the collectors gather the roots and leaves of the belladonna and poke indiscriminately and then, accidentally, incidentally, or designedly, mix them.—J. Am. M. Assoc. 1912, v. 59, p. 1604.

Patch, Edgar L.: Belladonna leaves were found to yield 14.4 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

J. D. Riedel, A.-G.: The ash content of belladonna leaves was found to vary from 12.7 to 14.7 per cent.—Riedel's Berichte, 1912, p. 49.

Caesar & Loretz: A sample of belladonna leaves gave an ash content of 23.5 per cent.—Jahres-Ber. 1912, p. 103.

Mann, E. W.: A carefully dried sample of English leaf yielded 14.97 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 8.

Dohme and Engelhardt: The assay process adopted by the new U. S. P., the aliquot part method, has a decided advantage over the present process, and gives very satisfactory results.—J. Am. Pharm. Assoc. 1912, v. 1, p. 599.

Caesar & Loretz: An outline of the Keller method of assay for belladonna, with an enumeration of the requirements included in the several pharmacopœias.—Jahres-Ber. 1912, p. 135-137.

Daels, Felix: Method for the estimation of total alkaloids in belladonna.—J. pharm. Anvers, 1912, v. 68, p. 543.

Sievers, Arthur F.: Some suggested modifications of the Pharmacopœia method for the assay of belladonna leaves; tabulated statement of results of analysis.—J. Am. Pharm. Assoc. 1912, v. 1, p. 199-200.

Johnson & Johnson: An illustrated description of the method employed for extracting belladonna and a review of the method of assay used.—Lab. Notes, 1912, p. 41-45.

Dohme and Engelhardt: In 1907 and 1908, 26 and 26.5 per cent of the samples of belladonna leaves submitted were rejected on account of deficiency of alkaloids, and in 1910 even 36 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 100.

Table showing reported variations in alkaloidal content of belladonna leaves.

Reporter.	Number of samples.	Minimum.	Maximum.	References.
		Per cent.	Per cent.	
Caesar & Loretz.....		0.175	0.488	Jahres-Ber. 1912, p. 48-49.
Gane, E. H.....	1		.23	J. Am. Pharm. Assoc. 1912, v. 1, p. 373.
Patch, E. L.....	5	.26	.46	J. Am. Pharm. Assoc. 1912, v. 1, p. 374.
Scoville, Wilbur L.....	105	.26	.45	J. Am. Pharm. Assoc. 1912, v. 1, p. 1341.
Vanderkleed, Chas. E.....	33	.263	.563	Proc. Pennsylvania Pharm. Assoc 1912, p. 179.

Thaysen, Holger: The keeping qualities of belladonna extracts.—*Arch. Farm. og Chemie*, 1912, v. 19, p. 211–221.

Diekman, George C.: Two samples of extract of belladonna leaves showed alkaloid content of 1.254 and 1.305.

Anon.: One sample of extract of belladonna contained 0.816 per cent, while a second sample contained 1.43 per cent of alkaloids.—*Südd. Apoth.-Ztg.* 1912, v. 53, p. 52.

Table showing some of the analytical results reported for tincture of belladonna.

Reporters.	Number of samples—		References.
	Exam-ined.	Re-jected.	
Howard, Chas. D.	10	4	Rep. New Hampshire Bd. Health, 1912, p. 171.
Strode, Sylvanus E.	2	1	Rep. Ohio Dairy & Food Com. 1912, 1913, p. 78.
Cook, Alfred N.	2	1	Rep. South Dakota F. & D. Com. 1912, p. 50.

Jensen, H.: Brief sketch of the applications of belladonna in veterinary medicine.—*Am. Vet. Rev.* 1911–1912, v. 40, p. 353.

Cartier, François: Belladonna, or, better, its alkaloid, atropine, may cause a primary slowing of the pulse, followed by an extraordinarily rapid pulse.—*J. Am. Inst. Homœop.* 1911–1912, v. 4, p. 243.

Fyfe, John William: Belladonna is undoubtedly a prophylactic against scarlatina, as it is thoroughly proven in practice. Recollect, however, that in doses sufficient to produce dilatation of the pupil it has no such influence.—*Nat. Ecler. M. Assoc. Quart.* 1912–1913, v. 4, p. 119.

Osborne, Oliver T.: There is no action of belladonna, stramonium, or hyoscyamus that is not that of either atropine or scopolamine; therefore, with these two alkaloids we can do away with all of the other preparations of the three closely allied drugs.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

Ellingwood, Finley: Belladonna is a remedy of rare value in certain cases during the first two weeks of typhoid fever.—*Am. J. Clin. Med.* 1912, v. 19, p. 487.

Cooper, H. J.: Belladonna poisoning resulting from the application of belladonna plaster to the breasts of a young primipara.—*Lancet*, 1912, v. 182, p. 1037.

Coughlin, Robert E.: Report of a case of belladonna poisoning in a child 7 years of age. Recovery in 12 hours.—*N. York M. J.* 1912, v. 95, p. 177.

The Registrar-General reports for England and Wales in 1910 5 accidental deaths and 2 suicides from belladonna.—*Pharm. J.* 1912, v. 89, p. 96.

For additional references see *Index Med.*, *Zentralbl. Exper. Med.*, *J. Am. M. Assoc.*, *Chem. Abstr.*, and *Chem. Zentralbl.*

BELLADONNÆ RADIX.

Schneider, Albert: Proposed outline for pharmacopœial description of belladonna root.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1336-1337.

Caesar & Loretz: The ash content of belladonna root varied between 6.07 and 7.84 per cent.—*Jahres-Ber.* 1912, p. 104. For an outline of the Keller method of assay see p. 147-148.

Dohme and Engelhardt: The standard of 0.5 per cent of total mydriatic alkaloids is met with in only a limited number of samples. It would be very wise to reduce the standard to 0.4 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 100.

Table showing reported variations in alkaloidal content of belladonna root.

Reporter.	Number of samples.	Minimum.	Maximum.	References.
		<i>Per cent.</i>	<i>Per cent.</i>	
Caesar & Loretz.....		0.318	0.55	<i>Jahres-Ber.</i> 1912, p. 75.
Hooper, David.....	2	.4	.45	<i>Pharm. J.</i> 1912, v. 89, p. 391.
Jensen, H. R.....	12	.11	.5	Evans' <i>An. Notes</i> , No. 7, 1912, p. 11.
Mann, E. W.....	2	.43	.49	<i>Ann. Rep. Southall Bros. & Barelay,</i> 1912, 1913, p. 8.
Seoville, Wilbur L.....	89	.36	.56	<i>J. Am. Pharm. Assoc.</i> 1912, v. 1, p. 1341.
Vanderkleed, Chas. E.....	10	.433	.780	<i>Proc. Pennsylvania Pharm. Assoc.</i> 1912, p. 179.

Buchan, J. R.: A mixture of 1 drachm of fluid extract of belladonna root and 4 ounces of water applied with the hand affords immediate relief in rhus poisoning.—*Am. J. Clin. Med.* 1912, v. 19, p. 865.

For additional references see under "Belladonnæ Folia."

BENZALDEHYDUM.

Smith, Carl E.: Benzaldehyde is colorless only when freshly distilled and becomes yellowish on keeping a short time.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 532.

Dodge, Francis D.: The assay of benzaldehyde and oil of bitter almonds, with a comparison of results by the different methods. Criticism of the U. S. P. method.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 17, p. 15-20. Also *Chem. & Drug.* 1912, v. 81, p. 513; and *Am. Perf.* 1912-13, v. 7, p. 185.

J. D. Riedel, A.-G.: The specific gravity may be as high as 1.055. In the test for chlorine slight opalescence should be permitted.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 182. Also Riedel's *Berichte* (1912), p. 38.

Rupp, E.: The testing of benzaldehyde for chlorine compounds.—*Apoth.-Ztg.* 1912, v. 27, p. 92.

Heyl, Georg: The testing of benzaldehyde for chlorine. The method outlined in the Ph. Germ. V was found to be unreliable.—Apoth.-Ztg. 1912, v. 27, p. 49–50.

Blanksma, J. J.: The preparation of halogen derivatives of benzaldehyde.—Chem. Weekblad, 1912, v. 9, p. 862–870.

BENZINUM.

Gehe & Co.: Marked increase in the amount of benzin exported from the United States to Germany.—Handelsbericht, 1912, p. 122.

Schneider and Richter: The Ph. Germ. V has materially moderated its requirements for petroleum benzin, which is now required to distill largely at from 50° to 70° and have a specific gravity of from 0.666 to 0.686. Petroleum benzin to be used for experimental purposes, however, must comply with more restricted requirements.—Pharm. Zentralh. 1912, v. 53, p. 185.

Tyrer and Gosling: The specific gravities and boiling points as given in the B. P. C. are not consistent and not obtainable in practice.—Chem. & Drug. 1912, v. 81, p. 204. See also Pharm. J. 1912, v. 89, p. 157.

Goerlich, R.: The need for purifying the petroleum benzin used for analytical purposes.—Pharm. Ztg. 1912, v. 57, p. 441. For correction, see p. 441; also p. 535.

Lucchini, V.: The cause of inflammation and of explosion of petroleum benzin.—Boll. chim. farm. 1912, v. 51, p. 253–260.

Friediger, A.: A case of acute intoxication in an infant from the external use of benzin for removing adhesive plaster.—Zentralbl. Exper. Med. 1912, v. 1, p. 380.

BENZOINUM.

Schneider and Richter: The Ph. Germ. V gives the origin of benzoin as probably a species of styrax. Rördorf has recently determined that the drug is obtained from *Styrax benzoin*.—Pharm. Zentralh. 1912, v. 53, p. 185.

Editorial: Attention is called to the recent contribution of Kerr, on the source of Siam benzoin (Kew Bulletin, No. 9, 1912).—Pharm. J. 1912, v. 89, p. 777.

Tunmann, O.: The export of benzoin from Singapore is reported as reaching an average of 300,000 kilogrammes annually.—Apoth.-Ztg. 1912, v. 27, p. 61.

Roure-Bertrand Fils: Exports of benzoin from Tonkin amounted in 1909 to 23,944 kilos; in 1910, 26,462 kilos; 1911, 59,209 kilos.—Sc. & Ind. Bull. 1912, Series 3, No. 6, p. 104.

Byrnes, Garret: The U. S. P. permits the use of the Sumatra benzoin, but really restricts the use to the Siam gum by exacting re-

quirements that the Sumatra does not comply with.—Proc. New Jersey Pharm. Assoc. 1912, p. 89.

Rippetoe and Minor: Sumatra benzoin, which usually contains cinnamic acid, can be distinguished from Siam benzoin by heating a small quantity with a little soda and water and warming the filtrate with potassium permanganate, when the odor of bitter almonds will be developed.—Am. J. Pharm. 1912, v. 84, p. 435.

Havenhill, L. D.: If Siam benzoin be retained it ought to be specially described, as good samples are almost wholly soluble in alcohol.—J. Am. Pharm. Assoc. 1912, v. 1, p. 860.

Rusby, H. H.: One of the greatest difficulties with which the Government has to contend in its treatment of the importation of benzoin is the failure of the Pharmacopœia to specify the allowable amounts of the different kinds of impurity.—J. Am. Pharm. Assoc. 1912, v. 1, p. 373.

Gane, E. H.: Benzoin runs fairly evenly, 70.8 per cent to 87.5 per cent soluble in alcohol.—J. Am. Pharm. Assoc. 1912, v. 1, p. 373.

Scoville, W. L.: One sample of benzoin contained 11.1 per cent ash and was only 72 per cent alcohol soluble. The impurities were sand and twigs from the tree.—J. Am. Pharm. Assoc. 1912, v. 1, p. 373.

Rippetoe and Minor: Ten samples of benzoin contained from 0.50 to 1.85 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 436.

North, Horace: Of 30 samples of Sumatra gum examined, the highest per cent ash was 3.41, lowest 0.60.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 16–18.

Mann, E. W.: Two samples of benzoin proved to be of but fair quality, being 66.41 and 67 per cent soluble in alcohol (90 per cent).—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 8.

Caesar & Loretz: The ash content of several samples of benzoin varied from 1.9 to 3.8 per cent.—Jahres-Ber. 1912, p. 102.

Hommell, Philemon E.: As aloes is of doubtful utility in compound tincture of benzoin, it should be eliminated and something else substituted of a more curative character. A formula containing myrrh in place of aloes is outlined.—Merck's Rep. 1912, v. 21, p. 2. See also Pharm. J. 1912, v. 88, p. 88.

BENZOSULPHINIDUM.

Abbott, J. S.: Even the word "saccharin" is a fraud.—Rep. Texas F. & D. Com. 1912, p. 23.

Smith, Carl E.: Saccharin is odorless when pure, but usually has a faint aromatic odor. Market samples have been found to melt between 215° and 225°.—J. Am. Pharm. Assoc. 1912, v. 1, p. 532.

van Itallie, E. I.: Six samples of saccharin were found to vary from 0.1 to 1.14 per cent of ash. One sample, evidently an adulter-

ated one, was found to contain 9.2 per cent of ash.—Pharm. Weekblad, 1912, v. 49, p. 332.

Carlinfanti and Scelba: The chemistry, physiological action, and the uses of saccharin and of dulcin.—Boll. chim. farm. 1912, v. 51, p. 505-514, 541-549, 580-586, 613-626.

Serger, H.: Synthetic sweetening agents. The chemistry, production, and properties of saccharin.—Chem. Ztg. 1912, v. 36, p. 829-836, 851-853.

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Ford, Charles M.: The use of saccharin is probably the most vicious form of legalized adulterations.—J. Am. Pharm. Assoc. 1912, v. 1, p. 118.

Floyd, Henry B.: The City of Washington Branch recommends that saccharin be not used in any preparation in the National Formulary which is to be frequently and periodically taken.—J. Am. Pharm. Assoc. 1912, v. 1, p. 277.

Hommell, Philemon E.: The exhibition of saccharin as a sweetening agent in various elixirs, cordials, sirups, mouth washes, etc., is condemned except for disguising the unpleasant taste of castor oil, and here nothing else will take its place.—Merck's Rep. 1912, v. 21, p. 32.

BERBERIS.

Thomas: Berberis is probably as near a specific for syphilis as has been found.—Eclectic M. J. 1912, v. 72, p. 530.

Waugh, William Francis: Berberine, given in daily doses of one to three grains for not less than six weeks, tends to induce contraction of relaxed connective tissue, and may be advantageously applied in every malady where that pathological element is a factor of importance.—Med. Rec. 1912, v. 81, p. 571.

BETANAPHTHOL.

Needham, R. H.: Betanaphthol is a coal tar derivative of little antiseptic value in medicine. Once in a while it is prescribed, but not enough to warrant its retention in the U. S. P.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1347.

Smith, Carl E.: The melting point of acceptable market samples varies from 119° to 123°. Other pharmacopœias give from 120° to 123°.—J. Am. Pharm. Assoc. 1912, v. 1, p. 532.

Harris, Norman M.: Intestinal antiseptics: a report on the use of salol, betanaphthol, and guaiacol carbonate.—*Repr. Therap. Res. Com.* 1912, p. 151-171.

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Pratt, Walter Ryley: Note on the determination of nitrates in bismuthi carbonas.—*Pharm. P.* 1912, v. 89, p. 152-154; for discussion see p. 176. See also *Year-Book of Pharmacy*, 1912, p. 506-513.

Jensen, H. R.: Two samples, estimated approximately for nitrate with the diphenylamine reagent, contained the equivalent of 0.05 and 0.1 per cent bismuth subnitrate.—*Evans' An. Notes*, No. 7, 1912, p. 14.

Aaron, Charles D.: Bismuth subcarbonate is nonpoisonous and probably has the same general effect as the subnitrate.—*Am. J. M. Sc.* 1912, v. 144, p. 501.

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Manseau, M.: On an adulterated dermatol.—*Bull. Soc. pharm. Bordeaux*, 1912, v. 52, p. 261-263.

Diekman, George C.: Of six samples of bismuth subgallate examined, 4 were found to conform with official requirements.—*Proc. New York Pharm. Assoc.* 1912, p. 131.

Jensen, H. R.: Two samples of normal color contained respectively 52.5 and 53.5 per cent of oxide; nitric acid being practically absent.—*Evans' An. Notes*, No. 7, 1912, p. 14.

Aaron, Charles D.: Bismuth subgallate is a very acceptable substitute for bismuth subnitrate. It can be freely suspended in water, and is nontoxic.—*Am. J. M. Sc.* 1912, v. 144, p. 501.

BISMUTHI SUBNITRAS.

François, Maurice: The analysis of bismuth subnitrate and the probable composition of this substance.—*J. pharm. et chim.* 1912, v. 6, p. 536-542.

Brown, Linwood A.: Thirty-nine samples analyzed; all conform to U. S. P.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 48.

Jensen, H. R.: Two faulty samples contained ammonium compounds, and yielded 89 per cent of bismuth oxide.—*Evans' An. Notes*, No. 7, 1912, p. 14.

Johnson, G. W.: Bismuth subnitrate is recommended in cases of pruritus ani.—*J. Am. M. Assoc.* 1912, v. 58, p. 52.

Schneider and Richter: The administration, or external application, of bismuth subnitrate is now recognized as not being without possible danger.—Pharm. Zentralh. 1912, v. 53, p. 186.

Ely, Leonard W.: A fatal case of bismuth paste poisoning.—Med. Rec. 1912, v. 81, p. 119.

Beck, Emil G.: Warning against indiscriminate use of bismuth paste in acute suppurations.—J. Am. M. Assoc. 1912, v. 58, p. 1622. See also Bell, F. McKelvey, p. 1873.

Blanchard, Wallace: The passing of bismuth paste.—Med. Rec. 1912, v. 81, p. 941.

Aaron, Charles D.: In 1829, Justinus Kerner published the history of a fatal poisoning by bismuth subnitrate, but later, in 1835, the fact was established that the poisoning resulted not from bismuth, but from hydrargyrum præcipitatum album.—Am. J. M. Sc. 1912, v. 144, p. 501.

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Hand, A.: Bismuth salicylate seems to have undoubted disinfectant properties in the intestinal disturbances of children.—J. Am. M. Assoc. 1912, v. 58, p. 894.

BROMOFORMUM.

Schneider and Richter: The Ph. Germ. V bromoform may now contain 4 per cent of alcohol and is required to congeal at from 5° to 6°.—Pharm. Zentralh. 1912, v. 53, p. 187-188.

Sargent, George J.: The decomposition of bromoform.—J. Phys. Chem. 1912, v. 16, p. 407-420.

Smith, Carl E.: A product containing only 1 per cent of alcohol decomposes rapidly. The German and Belgian pharmacopœias require 4 per cent, with a view to better keeping qualities.—J. Am. Pharm. Assoc. 1912, v. 1, p. 533.

Mindes, J.: One cc. of bromoform shaken with 1 drop each of 10 per cent solution of chromic acid and of sulphuric acid assumes an orange color with a blackish-green zone at the surface. On the addition of water the surface zone becomes light green and the lower layer dirty yellow.—Südd. Apoth.-Ztg. 1912, v. 52, p. 93.

BROMUM.

Smith, Carl E.: The U. S. P. tests are not sufficient to determine if the limit of 3 per cent of impurities is exceeded.—J. Am. Pharm. Assoc. 1912, v. 1, p. 533.

Schneider and Richter: The Ph. Germ. V bromine must be completely volatile and have a congealing point of 63° .—Pharm. Zentralh. 1912, v. 53, p. 188.

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Swain, Robert Lee: Buchu is a native African name.—Drug. Circ. 1912, v. 56, p. 63.

Young, W. Y.: At present *Barosma betulina* is commonly used to designate the source of short buchu.—Am. J. Pharm. 1912, v. 84, p. 259–262.

Rusby, H. H.: The demand for buchu U. S. P. has exceeded the supply and the price has been exceedingly high.—J. Am. Pharm. Assoc. 1912, v. 1, p. 374.

Kebler, L. F.: It has been a common practice to offer mixtures of buchu leaves with large quantities of twigs and stems collected indiscriminately.—J. Am. M. Assoc. 1912, v. 59, p. 1604. See also Year-Book of Pharmacy, 1912, p. 395.

Kebler, L. F.: The pharmacopœial standard for buchu leaves makes no provision whatever for the presence of any stems or other incidental foreign material. In practice it has been found necessary to allow a certain amount of the foreign material referred to.—Am. J. Pharm. 1912, v. 84, p. 501. Also J. Am. Pharm. Assoc. 1912, v. 1, p. 1405.

French, Harry B.: Some manufacturers are not waiting for the sanction of the Pharmacopœia, but are turning an honest (?) penny using the long leaf instead of the short leaf for manufacturing purposes.—J. Am. Pharm. Assoc. 1912, v. 1, p. 835.

Jensen, H. R.: A further examination of the leaves of *Buchu venusta* gives interesting figures. On chemical grounds this variety can not replace therapeutically the buchu now employed, although other clinical uses may exist.—Evans's An. Notes, No. 7, 1912, p. 15.

BUCHU (LONG).

Young, W. Y.: The plant yielding the long buchu is now usually called *Barosma serratifolia*, a name given it in 1824 by Bartling and Wendland.—Am. J. Pharm. 1912, v. 84, p. 261.

Rusby, H. H.: During the past year supplies of long buchu have probably exceeded those of genuine buchu.—J. Am. Pharm. Assoc. 1912, v. 1, p. 374.

French, Harry B.: If, as we have been told, the long buchu is not so valuable medicinally as the short leaf, then the wisdom of including this variety in the next U. S. P. may be questioned.—J. Am. Pharm. Assoc. 1912, v. 1, p. 835.

Evans, Edward: Carelessness in the collection of drugs is evidenced in long buchu leaves, where the *B. serratifolia* is often found mixed with another species which may be distinguished by not having the serrated margin.—Year-Book of Pharmacy, 1912, p. 395.

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Smith, Carl E.: The requirement that caffeine should produce colorless solutions with concentrated sulphuric or nitric acid, is hypercritical.—J. Am. Pharm. Assoc. 1912, v. 1, p. 533.

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Costes, G.: New method for the estimation of caffeine, by treatment with concentrated sulphuric acid and neutralization with chloroform.—Ann. chim. analyt. 1912, v. 17, p. 246-249.

Leulier, A.: Hydrated chloral combines with caffeine to form dichloral caffeine and monochloral caffeine.—J. pharm. et chim. 1912, v. 6, p. 20-21.

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Hollingsworth, H. L.: The influence of caffeine on mental and motor efficiency.—Therap. Gaz. 1912, v. 36, p. 1-6.

Wood, Horatio C., Jr.: The effects of caffeine on the circulatory and muscular systems.—Therap. Gaz. 1912, v. 36, p. 6-13.

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Salant, William: Further observations on the action of caffeine.—J. Pharmacol. & Exper. Therap. 1912-1913, v. 4, p. 341. See also p. 342, The influence of temperature on the toxicity of caffeine. (Abstract.)

Farr and Welker: In the amount given, corresponding to a small daily medicinal dose or to three ordinary cups of coffee, caffeine produced slight if any diuresis.—Am. J. M. Sc. 1912, v. 143, p. 411-415.

Cartier, François: The primary effect of coffee is characteristic as a pathological excitation of all the organic functions. In the homœopathic school it is one of our best remedies for the irritable heart.—J. Am. Inst. Homœop. 1911-1912, v. 4, p. 245.

Wiley, H. W.: Thousands of people in the country have contracted a habit through caffeine, which is a habit-forming drug.—Oil, Paint, and Drug Rep. 1912, v. 81, May 6, p. 34.

Ford, Charles M.: Caffeine is vastly more dangerous than alcohol, because more respectable, more insidious.—Proc. Nebraska Pharm. Assoc. 1912, p. 113.

Schieffelin, William Jay: We should not confine our attention to drugs alone, because certain so-called soft drinks fortified by the addition of caffeine, on account of their habit-forming character, are a menace. There can be no doubt that their permiscuous sale to children should be stopped.—Am. J. Pharm. 1912, v. 84, p. 25.

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Schneider and Richter: The Ph. Germ. V recognizes caffeine sodium salicylate as a simple mixture.—Pharm. Zentralh. 1912, v. 53, p. 285.

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Gilmore, Melvin R.: *Acorus calamus* was used by the Omaha Indians of Nebraska as a carminative and as a tonic, the rootstock being chewed at will or it was powdered and given in doses.—Meyer Bros. Drug. 1912, v. 33, p. 138.

Caesar & Loretz: A sample of calamus yielded 4.4 per cent ash.—Jahres-Ber. 1912, p. 104.

Patch, Edgar L.: Peeled calamus yielded 3.5 per cent ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

J. D. Riedel, A.-G.: The ash content of calamus was found to vary from 2.9 to 5.7 per cent; amount of insoluble ash to 0.8 per cent.—Riedel's *Berichte*, 1912, p. 50.

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Patch, E. L.: Most lots of calcium carbonate showed traces of iron and aluminum.—J. Am. Pharm. Assoc. 1912, v. 1, p. 374.

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Fordyce, John A.: The manufacture of chloride of calcium by electrolysis is sometimes attended by an erythematous œdematous inflammation of the face of the workmen, resembling erysipelas.—Med. Rec 1912, v. 81, p. 209.

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Puckner and Warren: Commercial calcium glycerophosphate. The calcium content was found to vary from 12.6 to 15.8 per cent, phosphorus from 11.4 to 12.1 per cent, and the residue on ignition from 47.7 to 51.9 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 749–754. See also *Rep. Chem. Lab. Am. M. Assoc.* 1912, v. 5, p. 12–19.

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Jensen, H. R.: One sample practically conformed to the German formula $\text{CaPO}_4\text{C}_3\text{H}_5(\text{OH})_2 \cdot 2\text{H}_2\text{O}$, rather than the anhydrous composition put forward in the B. P. C.—*Evans' An. Notes*, No. 7, 1912, p. 17.

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Schneider and Richter: Calcium hypophosphite can readily be made in the laboratory of the pharmacy.—*Pharm. Zentralh.* 1912, v. 53, p. 189–190.

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Pearson, W. A.: Most of the samples examined failed to respond to tests for absence of acid calcium phosphate, excess of chlorides, heavy metals or magnesium. One sample contained 7.5 per cent of magnesium.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 169.

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Beringer, Geo. M.: A proposed N. F. monograph for calcium lactate, which is required to be not less than 98 per cent pure.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 72.

Hill and Cocking: Calcium lactate is liable to vary in composition according to the method of preparation, and commercial samples examined were found to be far from uniform.—*Pharm. J. Lond.* 1912, v. 89, p. 155. Also *Year-Book of Pharmacy*, 1912, p. 481–485.

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Barnard, H. E.: A sample labeled plaster of Paris was found to be a mixture of calcium sulphate, calcium carbonate and calcium oxide.—Rep. Indiana Bd. Health, 1911, 1912, p. 265.

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Henkel, Alice: The garden marigold, of which the flowers are used, is treated much like other garden plants, and is very easy to grow.—Drug. Circ. 1912, v. 56, p. 134.

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Adlung: Calumba is indigenous to tropical East Africa, more particularly the region between the Zambesi and Rowuma.—Apoth.-Ztg. 1912, v. 27, p. 147.

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CALX CHLORINATA.

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with every gradation between these two.—Oil, Paint and Drug Rep. 1912, v. 82, Sept. 2, p. 48.

Baillaud, E.: Recent advances in the cultivation of camphor.—J. Agric. trop. 1912, v. 12, p. 362–367.

Emerson and Weidlein: Jamaica camphor; with a number of tables showing the yield from leaves and wood and the nature of the resulting product.—J. Ind. & Eng. Chem. 1912, v. 4, p. 33–36.

Morstatt, H.: A description and illustrations of a number of insects destructive to the camphor trade.—Pflanzer, 1912, v. 8, p. 18–24.

Anderson, George E.: Chinese camphor trade, with a consideration of the history of the industry, the change of source of supply, and quality of Chinese camphor.—Am. J. Pharm. 1912, v. 84, p. 77–80.

Anon.: Brief sketch of the camphor industry in China.—Pharm. J. 1912, v. 88, p. 509.

Schimmel & Co.: According to the German Consulate at Nagasaki, the shipments of camphor to the United States from Formosa were, during 1907, 35 piculs; in 1908, 35 piculs; in 1909, 35 piculs; in 1910, 53 piculs, and during 1911, 45 piculs.—Semi-Annual Report, 1912, October, p. 26.

Rentiers, J. B.: Report on the camphor industry in Formosa shows that out of a total of 6,613,718 pounds exported, 2,039,500 pounds went to the United States.—Pharm. J. 1912, v. 89, p. 410.

Editorial: Distillation of camphor from leaves is to be commenced on a practical scale in Formosa.—Pharm. J. 1912, v. 89, p. 363.

Geare, R. I.: The cultivation of camphor in the United States.—Merck's Rep. 1912, v. 21, p. 62.

Baillaud, E.: Camphor culture in the United States, with reference to the report of Hood and Erie (Bureau of Plant Industry, 1910).—J. Agric. trop. 1912, v. 12, p. 165–168.

Rabak, Frank: Some possible new sources of camphor, borneol, and cineol in wild American plants.—Merck's Rep. 1912, v. 21, p. 173–174.

Schneider and Richter: The Ph. Germ. V now permits a range of melting point of from 175° to 179°.—Pharm. Zentralh. 1912, v. 53, p. 190.

Smith, Carl E.: No pharmacopœia, so far as known, has as yet admitted synthetic camphor, although it is claimed in various quarters to be therapeutically equivalent to the natural product. Several suggested tests are outlined.—J. Am. Pharm. Assoc. 1912, v. 1, p. 535.

Malosse, H.: The determination of the density of camphor by means of the densities of its solutions in different liquids.—Compt. rend. Acad. sc. 1912, v. 154, p. 1697.

Havenhill and Rowland: The optical rotation of camphor should be given in the U. S. P. IX at not less than +8.20° when dissolved in alcohol 10 gm.; 100 cc. and observed in a 200 mm. tube at 20° with

sodium light. The list of solubilities and liquefiable substances might be extended.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 593.

Journiaux: Note on cryoscopy in its relation to camphor.—*Compt. rend. Acad. sc.* 1912, v. 154, p. 1592–1594.

Mindes, J.: Several characteristic reactions for camphor with fuming nitric acid.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 93.

Fuller, H. C.: Camphor forms with hydroxylamin a well defined oxim $C_{10}H_{16}NOH$, and advantage may be taken of this property for assaying camphor preparations. The procedure is outlined.—*Am. J. Pharm.* 1912, v. 84, p. 40–41.

Nelson, E. K.: A sample of spirit of camphor was submitted to 23 analysts for the determination of camphor by the hydroxylamin titration method. The results reported by 19 analysts varied from 8.33 to 9.72 per cent, while four analysts found slightly more camphor than was actually present.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1407.

Havenhill and Rowland: The present U. S. P. formula for spirit of camphor is suited to the needs of the American physicians and further tampering with it is unnecessary.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 590.

Bataille, H.: Note on the quantitative assay of spirit of camphor.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 407–411, 548.

Collins, Arthur T.: A method for assaying spirit of camphor by the use of the polariscope.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 514.

Laurén and Idman: The determination of camphor in alcoholic solutions of varying specific gravity.—*Pharm. Ztg.* 1912, v. 57, p. 676–677.

Table showing some of the analytical results reported for spirit of camphor.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Abbott, J. S.	21	3	Rep. Texas F. & D. Com. 1912, p. 24.
Barnard, H. E.	62	41	Rep. Indiana Bd. Health, 1911, 1912, p. 269.
Brown, Linwood A.	212	113	Proc. Kentucky Pharm. Assoc. 1912, p. 48.
Caspari, Chas., jr.	180	104	Rep. Maryland F. & D. Com. 1911, Baltimore, 1913, p. 15.
Caspari, Chas., jr.	1	0	Rep. Maryland F. & D. Com. 1912, Baltimore, 1913, p. 15.
Cook, Alfred N.	50	18	Rep. South Dakota, F. & D. Com. 1912, p. 50.
Cox, C. B.	46	24	Proc. Washington Pharm. Assoc. 1912, p. 61.
De Barr, Edwin.	44	16	Rep. Oklahoma P. H. Dept. 1912, p. 454–455.
Fitz-Randolph, R. B.	15	15	Rep. New Jersey Bd. Health, 1911, 1912, p. 226.
Ford, Chas. M.	1	1	Bull. Colorado Bd. Health, 1911, v. 11, December, p. 5.
Halverson, J. O.	18	14	Rep. Missouri F. & D. Com. 1912, p. 9.
Havenhill, L. D.	27	10	Proc. Kansas Pharm. Assoc. 1912, p. 60.
Howard, Chas. D.	17	5	Rep. New Hampshire Bd. Health, 1912, p. 171.
Jaffa, M. E.	5	4	Proc. California Pharm. Assoc. 1912, p. 85.
Klueter, Harry.	60	32	Rep. Wisconsin D. & F. Com. 1912, p. 60.
Savre, L. E.	10	3	Bull. Kansas Bd. Health, 1912, v. 8, p. 104.
Stallings, R. E.	7	7	Bull. Georgia Dept. Agric. No 56 (1912), p. 124.
Strode, Sylvanus E.	14	8	Rep. Ohio D. & F. Com. 1911, 1912, p. 65.
Tilford, J. Floyd.	12	5	Rep. Kansas Bd. Health (6th Biennial), 1912, p. 113.

Anon.: A recent prosecution calls attention to the fact that while the Ph. Fr. V requires camphorated oil to be prepared with olive oil, the description of oil of poppy includes the statement that it is used in the preparation of camphorated oil.—*Répert. Pharm.* 1912, v. 24, p. 473.

Malosse, Henri: A comparative study of the physical constants of camphorated oil and olive oil, with tabulated results at different temperatures ranging from 12° to 25°.—*Bull. Pharm. Sud-Est.*, 1912, v. 17, p. 33–36.

See also under *Linimentum Camphoræ*.

Perrin: Note on the danger of employing camphor in rhinologic practice in infants.—*Répert. Pharm.* 1912, v. 24, p. 317.

Happich, C.: Two and one half to four grammes of camphor given in one dose act very toxically. The quantity of camphor injected should be carefully watched. (*Münch. med. Wehnschr.* March. 19.)—*N. York M. J.* 1912, v. 95, p. 901. See also *J. Am. M. Assoc.* 1912, v. 58, p. 1322.

Rübsamen, W.: Fatal case of camphor intoxication from the injection into the abdominal cavity, of 170 cc. of standard 10 per cent camphorated oil. (*Zentrbl. Gynäkol.* v. 36, No. 31.)—*J. Am. M. Assoc.* 1912, v. 59, p. 977. See also Editorial Note: *Lancet*, 1912, v. 183, p. 546.

Anon.: Inquest on the body of a woman who died at Dublin after drinking camphor liniment.—*Pharm. J.* 1912, v. 89, p. 499. See also p. 264.

Liebmann, E.: Experimental research on the influence of camphor on the lesser circulation.—*Arch. exper. Path. u. Pharmacol.* 1912, v. 68, p. 59–82.

Osborne, Oliver T.: Camphor is one of the best cardiac stimulants that we possess.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.* and *Chem. Zentralbl.*

CAMPHORA MONOBROMATA.

Smith, Carl E.: Monobromated camphor should be nearly free from water soluble halogen compounds. The nonvolatile matter should not exceed 0.05 per cent, and the melting range of 74° to 77° seems advisable.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 536.

Werts, F. Carlos: The monobromated camphor is a God-send for cholera infantum; it abates the cerebrospinal hyperæmias, relieves irritation, controls the reflex symptoms and saves the patient.—*Ellingwood's Therap.* 1912, v. 6, p. 175–176.

CANNABIS INDICA.

Mitlacher, Wilhelm: Observations on the cultivation of *Cannabis sativa indica*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 377.

Borneman, John A.: Cannabis can be very readily cultivated.—Am. J. Pharm. 1912, v. 84, p. 553.

Lackey, R. H.: Bombay cannabis indica is practically unavailable at the present time and large quantities of other varieties of cannabis are being imported and apparently find a ready market.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 61.

Pearson, W. A.: A Mexican and an American grown sample were found much below standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 169.

Xrayser H.: Cannabis indica has fallen greatly into disuse in this country, and it matters little to us whether the drug is produced in Asia, Africa, or America.—Chem. & Drug. 1912, v. 81, p. 547.

Hamilton, H. C.: The pharmacopœial requirements for *C. sativa*, with comments on the need of further specifications.—J. Am. Pharm. Assoc. 1912, v. 1, p. 200–203.

Rusby, H. H.: Supplies of cannabis indica have continued scarce and prices high, which has stimulated the importation of large amounts of the drug which can not be regarded as the U. S. P. article.—J. Am. Pharm. Assoc. 1912, v. 1, p. 374.

Eckler and Miller: Commercial samples of American cannabis were found to vary widely in their activity. None were as active as good samples of the Indian drug.—Am. J. Pharm. 1912, v. 84, p. 488–495. See also Eighth Internat. Cong. Appl. Chem. 1912, v. 17, p. 23–30; and Pharm. Post, 1912, v. 45, p. 902.

Rippetoe and Minor: Six samples of cannabis indica contained from 14.20 to 14.44 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 437.

J. D. Riedel, A.-G.: The ash content of cannabis was found to vary from 6.0 to 7.1 per cent; amount of insoluble ash to 2.4 per cent.—Riedel's Berichte, 1912, p. 51.

Patch, E. L.: Samples of cannabis indica gave ether soluble resin, 12.1 per cent, 11.1 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 374.

Vanderkleed, Chas. E.: The assay of 4 samples of cannabis indica varied from 12.460 to 16.820 per cent of resin; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Mann, E. W.: A parcel of *Cannabis sativa*, grown in Greece, proved to contain a much higher proportion of resin than occurs in the Indian grown drug.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 8.

Caesar & Loretz: Genuine Indian hemp was found to yield 17.53 per cent of extract while the African variety yielded 16.40 per cent.—Jahres.-Ber. 1912, p. 62.

Stewart, F. E.: Fifteen samples of fluid extract of *cannabis indica* showed a variation of 40 to 150 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1452.

Marshall and Wood: The value of the acetyl number in the standardization of preparations of Indian hemp.—*Brit. M. J.* 1912, v. 1, p. 1234.

Eckler, C. R.: Progress in methods of physiological testing; brief outline of the methods used in the standardization of the digitalis series, ergot and *cannabis indica*.—*Proc. Indiana Pharm. Assoc.* 1912, p. 65–70.

Houghton, E. M.: Report of the committee on physiological testing, on the physiological assay of pharmaceutical preparations of *C. sativa* by noting the nature of the intoxication in carefully selected dogs.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1305.

Cushny, A. R.: Since the introduction of physiological assay by one firm they have had practically no complaints whatever as to the inefficacy of products of *cannabis indica*.—*Brit. M. J.* 1912, v. 2, p. 1558.

Moreau, B.: Brief note on Indian hemp. Apropos of the thesis of Bouquet.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 599–601.

Book Review: An essay on hasheesh, including observations and experiments by Victor Robinson.—*Am. J. Pharm.* 1912, v. 84, p. 429.

Cook, N. M.: A specific use for *cannabis indica* is found in a condition simulating nervous breakdown and accompanied by irregular functions of the heart.—*Ellingwood's Therap.*, 1912, v. 6, p. 171–172.

CANTHARIS.

Schneider and Richter: *Cantharides* is directed by the Ph. Germ. V to be well dried and kept in well closed containers.—*Pharm. Zentralh.* 1912, v. 53, p. 190.

Gehe & Co.: The marked reduction in the consumption of *cantharides* is noted and the structural characteristics of the beetle are described.—*Handelsbericht*, 1912, p. 51–52.

Dohme and Engelhardt: *Cantharis* and its preparations should be assayed.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 599.

Caesar & Loretz: An outline of Fromme's modification of the Baudin method of assay, with the limitations for ash and the requirements for *cantharidin* content included in the several pharmacopœias.—*Jahres-Ber.* 1912, p. 111–113.

Bernegau, L. H.: Twenty-one samples ranged from 0.217 to 1.583 per cent of *cantharidin* when assayed by the process of the German Pharmacopœia; 12 were below 0.6 per cent.—*Proc. Pennsylvania Pharm. Assoc.* 1913, p. 170.

Patch, E. L.: Samples of Russian *cantharides* gave from 0.4 to 0.5 per cent *cantharidin*.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 374.

Johnson & Johnson: Cantharidin content varied from 0.75 to 1.0 per cent; the ash content varied from 6.5 to 6.9 per cent.—Lab. Notes, 1912, p. 14.

Rippetoe and Minor: Two samples of cantharides contained 6.40 and 6.50 per cent of ash respectively.—Am. J. Pharm. 1912, v. 84, p. 437.

Caesar & Loretz: A sample of cantharides contained 6.6 per cent of ash.—Jahres-Ber. 1912, p. 102.

Richter, R.: The Ph. Germ. V process of maceration for making tincture of cantharides extracts only 0.6 per cent of the cantharidin content.—Pharm. Zentralh. 1912, v. 53, p. 1269.

Diekman, George C.: Though the present cantharides cerate has attracted little attention since its adoption, there is no suggestion to drop it from the official list.—Proc. New York Pharm. Assoc. 1912, p. 118.

Lucas, E. W.: The official monograph yields an ointment of uncertain strength and Greenish's modification has been adopted in its place.—Chem. & Drug. 1912, v. 80, p. 263.

Anon.: In the pathogenesis of cantharis are found symptoms identical with those of herpes zoster and, clinically, this remedy has proved to be almost a specific in this condition.—J. Am. Inst. Homœop. 1911-1912, v. 4, p. 921.

Anon.: Very small doses of cantharidin properly adjusted will be found valuable in the treatment of dysuria in old men.—Ellingwood's Therap. 1912, p. 119.

CAPSICUM.

Richter, R.: The Ph. Germ. V directs the ripe fruit of *Capsicum annum* Linné. The ash content is not to exceed 6.5 per cent.—Pharm. Zentralh. 1912, v. 53, p. 509.

Seoville, Wilbur L.: The pharmacist can not by specifying a certain species of capsicum be sure thereby of securing the most active medicinally.—J. Am. Pharm. Assoc. 1912, v. 1, p. 453.

Dohme and Engelhardt: The percentage of oleoresin and a method of estimation should be given.—J. Am. Pharm. Assoc. 1912, v. 1, p. 599.

Vanderkleed, Chas. E.: The assay of 4 samples of capsicum varied from 11.410 to 16.700 per cent of oleoresin; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Johnson & Johnson: The ether extract varied from 16 to 19 per cent.—Lab. Notes, 1912, p. 14.

Rippetoe and Minor: Six samples of capsicum contained from 4.79 to 6.40 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 437.

Mann, E. W.: Two samples of powdered capsicum yielded 4.83 and 4.27 per cent of ash, respectively.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 9.

J. D. Riedel, A.-G.: The ash content of capsicum was found to vary from 4.3 to 6.6 per cent; amount of insoluble ash to 0.2 per cent.—Riedel's *Berichte*, 1912, p. 49.

Tilford, J. Floyd: Two samples of tincture of capsicum examined, one illegal.—Rep. Kansas Bd. Health (6th Biennial), 1912, p. 113.

CARBO ANIMALIS.

Smith, Carl E.: The test for limit of ash should be made with the dried substance, or the calculation made on the basis of the dried substance.—J. Am. Pharm. Assoc. 1912, v. 1, p. 536.

Adler, O.: Highly successful results reported from the use of animal charcoal in the treatment of internal disease in poison cases. (Wien. klin. Wchnschr. v. 25, No. 21.)—J. Am. M. Assoc. 1912, v. 58, p. 2053.

CARBO LIGNI.

Gane, E. H.: Imperfectly carbonized samples are of frequent occurrence.—J. Am. Pharm. Assoc. 1912, v. 1, p. 375.

Smith, Carl E.: In addition to the U. S. P. requirements, it should meet the following: Dried 2 hours at 100° it should lose not more than 5 per cent in weight. Whey dry, it should burn without a luminous flame and leave not more than 5 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 536.

Caesar & Loretz: Some difficulty is experienced in securing a vegetable charcoal with a limit of 5 per cent of ash. The ash content varied from 2.1 to 18.2 per cent.—Jahres-Ber. 1912, v. 25, p. 102.

Anon.: The Japanese have long used charcoal as a remedy for ptomaine poisoning.—Chem. & Drug. Australas. 1912, v. 27, p. 113.

CARBON DIOXIDE.

Minor, John C., Jr.: The manufacture and testing of carbonic acid cylinders.—J. Ind. & Eng. Chem. 1912, v. 4, p. 88-96.

Warburg, Otto: A note on the determination of minute quantities of carbon dioxide dissolved in water.—Ztschr. physiol. Chem. 1912, v. 81, p. 202.

Rhead and Wheeler: The rate of reduction of carbon dioxide.—J. Chem. Soc. Lond. 1912, v. 101, p. 831-845.

Nyström, G.: Carbon dioxide snow in the treatment of superficial tumors.—(Hygiea, v. 74, No. 1.)—J. Am. M. Assoc. 1912, v. 58, p. 906.

Bernstein, Ralph: A comparative study with reference to other chemical substances used in the treatment of cutaneous neoplasms.—Hahnemann. Month. 1912, v. 47, p. 163-171.

Anderson, H. Graeme: Solid carbon dioxide in the treatment of hæmorrhoids.—Brit. M. J. 1912, v. 1, p. 120.

Ahlborn, Maurice B.: A simple method for making carbon dioxide snow.—*J. Am. M. Assoc.* 1912, v. 58, p. 1009-1010.

Royer, Gouverneur H.: A cheap and portable apparatus for forming carbon dioxide pencils.—*J. Am. M. Assoc.* 1912, v. 58, p. 1939.

Sibley, W. Knowsley: On a new method of applying carbon dioxide snow by the use of a solution of solid carbon dioxide in ether or absolute alcohol.—*Practitioner*, 1912, v. 89, p. 134-136.

Levi, Ettore: Carbon dioxide is not merely a waste product of the body, but is one of the most important of the body's hormones, exercising a regulative influence on the action of the heart, on the tonus of blood vessels, and especially on the respiration.—*J. Am. M. Assoc.* 1912, v. 58, p. 773-774.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.*; *J. Soc. Chem. Ind. and Chem. Zentralbl.*

CARBONEI DISULPHIDUM.

Taylor, Edward R.: The manufacture of carbon bisulphide; with an illustration showing the apparatus used, and a view of the carbon bisulphide plant at Penn Yan, New York.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 557-559.

Groag, D.: Carbon bisulphide for ascarids in the horse.—(*Allatorvosi Lapok*, 1910, v. 33, p. 172.)—*Exper. Sta. Rec.* 1912, v. 26, p. 588.

News Note: At Ayr a man named Thomson died as the result of accidentally taking bisulphide of carbon.—*Pharm. J.* 1912, v. 88, p. 670.

CARDAMOMUM.

Schimmel & Co.: The exports of cardamom from Ceylon in 1911 amounted to 564,819 lbs., as compared with 995,680 in 1904.—*Semi-Annual Report*, 1912, October, p. 32.

Gehe & Co.: The production of cardamom seeds on the island of Ceylon is steadily decreasing due to various causes.—*Handelsbericht*, 1912, p. 67.

Anon.: The imports of cardamomum seed into the United States during 1910 amounted to 126,267 pounds; in 1911, 94,398 pounds.—*Cons. & Tr. Rep.* May 13, 1912, p. 583.

Rusby, H. H.: Nearly all of the cardamom seeds which are imported in the shelled condition are adulterated.—*Proc. New York Pharm. Assoc.* 1912, p. 138.

Rippetoe and Minor: Eight samples of cardamom contained from 0.24 to 7.60 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 437.

Mann, E. W.: One sample of cardamom yielded 18.01 per cent of ash, probably due to impregnating with a mineral solution. Two

other samples gave 4.09 and 4.13 per cent of ash, respectively.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 9.

J. D. Riedel, A.-G.: The ash content of cardamom was found to vary from 7.2 to 8.4 per cent; amount of insoluble ash to 2.1 per cent.—Riedel's *Berichte*, 1912, p. 49.

Thum, John K.: A modified formula for *tinctura cardamoni composita*.—Am. J. Pharm. 1912, v. 84, p. 298.

CARUM.

Schimmel & Co.: According to the Dutch Ministry of Agriculture the caraway crop for 1911 amounted to 224,419 bales, as compared with 179,812 bales in 1910 and 171,447 bales in 1909, all weighing 50 kilos each.—Semi-Annual Report, 1912, October, p. 30.

Anon.: The importation of caraway seeds into the United States during 1910 amounted to 2,951,702 pounds; in 1911, 2,856,908 pounds.—Cons. & Tr. Rep. May 13, 1912, p. 583.

Rusby, H. H.: Caraway is extremely liable to contamination with large amounts of stems, gravel, sand, dust, weed seeds, and other impurities.—J. Am. Pharm. Assoc. 1912, v. 1, p. 504.

J. D. Riedel, A.-G.: The ash content of carum was found to vary from 6.2 to 7.9 per cent.—Riedel's *Berichte*, 1912, p. 49.

CARYOPHYLLUS.

Weddell, Alexander W.: Approximately seven-eighths of the world's clove supply is grown in Zanzibar; the deliveries in 1911 totaled 20,656,860 pounds, as against 11,033,190 pounds in 1910. The exports to the United States amounted to 3,548,410 pounds in 1911, against 1,222,225 pounds in 1910.—Cons. & Tr. Rep. November 15, 1912, p. 833–838. See also Figart, D. Milton, p. 1339.

Caesar & Loretz: The present high price of cloves is ascribed to the failure of the crop.—*Jahres-Ber.* 1912, p. 26.

Besson, A. A.: The stem content of cloves.—Chem. Ztg. 1912, v. 36, p. 593.

Schneider and Richter: The Ph. Germ. V permits 8 per cent of ash in cloves.—Pharm. Zentralh. 1912, v. 53, p. 227.

Rippetoe and Minor: Two samples of cloves examined contained 4.00 and 5.34 per cent of ash, respectively.—Am. J. Pharm. 1912, v. 84, p. 438.

J. D. Riedel, A.-G.: The ash content of cloves was found to vary from 5.4 to 7.3 per cent.—Riedel's *Berichte*, 1912, p. 49.

Jensen, H. R.: One sample of Zanzibar yielded 26.8 per cent of ethereal extract by Soxhlet exhaustion, and suffered a total loss of weight, after prolonged heating at 110°, of 29 per cent.—Evans's An. Notes, No. 7, 1912, p. 23.

CERA ALBA.

Linke, II.: On beeswax and its examination according to the Ph. Germ. V.—Apoth.-Ztg. 1912, v. 27, p. 701-702, 712-714, 737-739.

Schneider and Richter: The specific gravity of white wax is given as from 0.968 to 0.973 and the melting point as from 64° to 65°.—Pharm. Zentralh. 1912, v. 53, p. 227-228.

van Itallie, E. I.: The melting point of 6 samples of white wax was found to vary from 60.4° to 62.8°; the specific gravity from 0.956 to 0.968; the acid number from 16.8 to 23.2, and the ester number from 73.6 to 83.1.—Pharm. Weekblad, 1912, v. 49, p. 331-332.

Richter, Ernst.: White wax was found to have a specific gravity of 0.955 at 18°, in place of 0.968.—Apoth.-Ztg. 1912, v. 27, p. 50.

Anon.: Four samples of white wax varied in specific gravity from 0.953 to 0.950, melting point 58.5° to 65°, acid number 19.19 to 40.2, and ester number 53.32 to 61.8. Three of the samples were adulterated.—Südd. Apoth.-Ztg. 1912, v. 53, p. 52.

Kebler and Boyles: Of 5 samples of white wax, 3 were adulterated.—Bull. Bur. Chem. U. S. Dept. Agric. 1912, No. 150, p. 49-51.

Jensen, II. R.: Fourteen samples had an acid value of from 21 to 25; ester value, 72 to 77; saponification value, 96 to 99; specific gravity, 0.963 to 0.973; and melting point, 62.5° to 63°.—Evans' An. Notes, No. 7, 1912, p. 11.

Mann, E. W.: Five of six samples of white beeswax were normal. The acid number was almost invariably higher than that of the yellow variety.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 7.

Düick: A sample of white wax examined contained ceresin and melted at 59°.—Schweiz. Wchenschr. Chem. u. Pharm. 1912, v. 50, p. 516.

CERA FLAVA.

Havenhill, L. D.: Considerable of the domestic beeswax is produced in apiaries in all of which it is the custom to use "starters," "foundation," or "guide combs."—J. Am. Pharm. Assoc. 1912, v. 1, p. 860.

Heiduschka and Vogel: Some additional observations on the nature of propolis.—Pharm. Zentralh. 1912, v. 53, p. 1087-1088.

Schneider and Richter: The Ph. Germ. V prohibits the presence of ceresin and prescribes a specific gravity of from 0.960 to 0.970 and a melting point of from 63.5° to 64.5°. It also permits a greater variation in the acid and ester numbers.—Pharm. Zentralh. 1912, v. 53, p. 228-230.

Feldstein, L.: The refractive index of beeswax, with tables showing the refractive index readings at different temperatures of beeswax samples of known purity and of commercial samples.—J. Ind. & Eng. Chem. 1912, v. 4, p. 498-499.

Richter, R.: The determination of the acid and ester number according to the Ph. Germ. V does not give reliable results.—Pharm. Zentralh. 1912, v. 53, p. 73.

Gehe & Co.: The determination of the acid number according to the Ph. Germ. V method is not simple, as toward the end of the titration some of the wax is precipitated and must be brought into solution by reheating. A change in the nature of the solvent is suggested.—Handelsbericht, 1912, p. 54-55.

Lejeune, Albert: A report on the comparative examination of methods for the detection of adulterations of beeswax.—Bull. Soc. Chim. Belg. 1912, v. 26, p. 77-85.

Kebler and Boyles: Character of beeswax submitted with bids. Methods of analysis. Of 21 samples of yellow wax, 12 were adulterated.—Bull. Bur. Chem. U. S. Dept. Agric. 1912, No. 150, p. 49-51.

Barnard, H. E.: One sample of yellow beeswax examined was found to be adulterated.—Rep. Indiana Bd. Health, 1911, 1912, p. 276.

Havenhill, L. D.: Five of the 12 samples examined were adulterated; paraffin was the chief adulterant.—Proc. Kansas Pharm. Assoc. 1912, p. 61.

Jensen, H. R.: Fifteen out of eighty-seven samples of "yellow" wax from various sources had an acid value of from 5 to 21; ester value, 32 to 88; saponification value, 44 to 99; specific gravity, 0.963 to 0.969; melting point, from 56° to 65°.—Evans' An. Notes, No. 7, 1912, p. 11.

Buchner, Georg.: Abnormal wax. A report on 7 samples in which the relation of acid number to ester number was as 1:3.—Ztschr. öffentl. Chem. 1912, v. 18, p. 90-91.

Oediger, W.: A sample of yellow wax did not have the required acid and saponification numbers.—Apoth.-Ztg. 1912, v. 27, p. 166.

Dück: A sample of yellow wax examined contained rosin, stearic acid and ceresin.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 514.

Anon.: Two samples of yellow wax showed the following constants: specific gravity 0.959 and 0.935; melting point 63.5° and 63°; acid number 18.7 and 9.83; ester number 67.8 and 33.7. The second sample was adulterated.—Südd. Apoth.-Ztg. 1912, v. 53, p. 52.

Spindler: Reports on a sample of yellow wax, evidently highly adulterated with paraffin and other substances.—Südd. Apoth.-Ztg. 1912, v. 52, p. 11.

Mann, E. W.: Six parcels of yellow beeswax proved to be of satisfactory nature. The specific gravity varied from 0.963 to 0.968; melting point from 63° to 64°; the acid value 18.70 to 20.49; the saponification value 92.45 to 98.40.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 8.

CERATA.

Schneider and Richter: The Ph. Germ. V includes cerates as a new class of preparations.—Pharm. Zentralh. 1912, v. 53, p. 230.

Diekman, George C.: Suggested formula and method of preparation for cerate.—Proc. New York Pharm. Assoc. 1912, p. 117.

CERII OXALAS.

McEwan, Donald: Cerium oxalate, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

Needham, R. H.: Another heirloom from previous Pharmacopœias, which has passed, as the late Grover Cleveland would say, "into innocuous desuetude." It is suggested that it remain that way and not be retained in the Pharmacopœia. As a sedative for nausea it is no longer used.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1347.

CETACEUM.

Schneider and Richter: The Ph. Germ. V now gives Lacepède as the author of the name *Physeter macrocephalus*. The specific gravity is permitted to range from 0.940 to 0.945, and the melting point from 45° to 54°.—Pharm. Zentralh. 1912, v. 53, p. 231.

Mann, E. W.: A number of samples of spermaceti gave quite normal results, but one sample gave an unusually low saponification value of 113.7.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 23.

CHLORALFORMAMIDUM.

Schneider and Richter: The Ph. Germ. V gives the solubility of chloralformamide as 1:3 in water, and 1:2.5 in alcohol.—Pharm. Zentralh. 1912, v. 53, p. 233.

CHLORALUM HYDRATUM.

McEwan, Donald: Chloral hydrate, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

Smith, Carl E.: Much confusion exists as to the melting point, which is an important test of purity. A melting point higher than 51° is probably due to butylchloral hydrate.—J. Am. Pharm. Assoc. 1912, v. 1, p. 536.

Schneider and Richter: The Ph. Germ. V now requires that hydrated chloral soften at 49° and be fully melted at 50°.—Pharm. Zentralh. 1912, v. 53, p. 233.

Hellriegel, A.: On the detection of chloral alcoholate in chloral hydrate, according to the Ph. Germ. V.—Apoth.-Ztg. 1912, v. 27, p. 362.

Brown, Linwood A.: Six samples analyzed; all U. S. P. quality.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 48.

Marcelet, H.: One sample of chloral did not comply with the Codex.—*Bull. Pharm. Sud-Est*, 1912, v. 17, p. 532.

Wolter, F.: Samples of chloral hydrate were found to redden blue litmus paper, due to the decomposition of chloral hydrate into dichloraldehyde and hydrochloric acid.—*Pharm. Ztg.* 1912, v. 57, p. 472.

Cohn, Georg: A contribution to our knowledge of chloral, with a description of the several compounds of chloral.—*Pharm. Zentralh.* 1912, v. 53, p. 27-28.

Feist, Franz: The condensation products of chloral with acid amides.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 945-962.

Leulier, A.: Combination of hydrated chloral with urotropine and with caffeine.—*J. pharm. et chim.* 1912, v. 6, p. 18-24.

Murphy, W. J.: Therapeutic uses of chloral hydrate. A brief digest of authoritative opinion.—*Therapist*, 1912, v. 22, p. 22-24, 33-35, 41-42.

Osborne, Oliver T.: Among the hypnotics there is still none better than chloral; all hypnotics must be graded from this old drug.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

Hopkins, J. G.: Chloral hydrate may occasionally produce fatty changes in the liver, similar to those caused by small doses of chloroform.—*N. York M. J.* 1912, v. 95, p. 1113.

Anon.: Coroner's inquest on the death of a physician from an overdose of chloral.—*Pharm. J.* 1912, v. 88, p. 221.

CHLOROFORMUM.

Baskerville, Charles: The chemistry of inhalation anæsthetics, chloroform.—*J. Am. M. Assoc.* 1912, v. 59, p. 1837-1841, and *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 176. See also Baskerville and Hamor: *J. Ind. & Eng. Chem.* 1912, v. 4, p. 212-220, 278-280, 362-372, 422-429, 499-506, 571-581.

Frerichs, F. W.: The manufacture of chloroform from bleaching powder and ethyl alcohol; with a report of practical experiences, and a number of tables showing the yield obtained.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 345-352, 406-413.

O'Reilly, Osborne: Judging from the published opinions of many authorities, chloroform prepared from rectified alcohol is in no way superior to that made from methylated spirit or acetone.—*Brit. & Col. Drug.* 1912, v. 62, p. 489.

Editorial: The preparation in England of pure chloroform from acetone on a commercial score dates from 1880.—*Brit. & Col. Drug.* 1912, v. 61, p. 61.

Macfarlan & Co., J. F.: Chloroform being a definite chemical substance, a pure product, quite irrespective of source, can be nothing

but pure chloroform.—*Chem. & Drug*. 1912, v. 80, p. 31. See also Xrayser II.: p. 49.

Smith, Carl E.: The specific gravity (1.476 at 25°/25°) does not accurately correspond to maximum alcohol content of 1 per cent as intended.—*J. Am. M. Assoc.* 1912, v. 1, p. 537.

Schneider and Richter: The Ph. Germ. V now permits the presence of from 0.6 to 1 per cent of absolute alcohol in chloroform.—*Pharm. Zentrallh.* 1912, v. 53, p. 233–234.

Bernegau, L. H.: Four samples were rejected because they showed small quantities of impurities decomposable by sulphuric acid.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 170.

Pearson, W. A.: Four samples were rejected on account of the presence of chlorinated products.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 170.

Mayer, Joseph L.: A rapid, accurate method for the quantitative estimation of chloroform in chloroform liniment.—*Proc. New York Pharm. Assoc.* 1912, p. 295.

Pinneo, Frank Wilcox: A new regulating dropper for ether or chloroform, usable on any container.—*J. Am. M. Assoc.* 1912, v. 59, p. 877.

Editorial: Whoever first guessed or even showed that chloroform possessed anæsthetic properties, it is certain that its use in surgery and obstetrics was established by Simpson, but for whose brilliant and strenuous advocacy the agent would in all probability never have gained a footing in medical practice.—*Brit. M. J.* 1912, v. 2, p. 1681.

Monroe, P. W.: Discusses chloroform fatalities and reports six cases of sudden death which occurred during the early stages of anæsthesia.—*J. Am. M. Assoc.* v. 58, p. 89–90.

Editorial: Chloroform has increasingly asserted itself as a dangerous anæsthetic.—*New York M. J.* 1912, v. 96, p. 911.

Stiles, Howard: Leonard Guthrie is credited with the pioneer work in reference to chloroform poisoning.—*J. Am. M. Assoc.* 1912, v. 58, p. 434.

Freedman, L. H.: Chloroform is the safest of all volatile anæsthetics.—*Am. J. Clin. Med.* 1912, v. 19, p. 641.

Buxton, Dudley: Chloroform is admittedly more toxic than ether, but it will only do harm when employed as a poison and not as an anæsthetic.—*Lancet*, 1912, v. 182, p. 579.

Metzenbaum, Myron: Chloroform is to be considered a dangerous anæsthetic even in the hands of an expert.—*J. Am. M. Assoc.* 1912, v. 58, p. 166.

Turpin, Thomas J.: Protest against the report of the committee on anæsthesia that chloroform is no longer justifiable in major operations.—*J. Am. M. Assoc.* 1912, v. 59, p. 135.

An editorial (Pharm. J. 1912, v. 89, p. 96) calls attention to the following report on deaths by anæsthetics included in the seventy-third annual report of the Registrar-General of births, deaths, and marriages in England and Wales for the year 1910:

Anæsthetic.	Males.	Females.	Total.
A. C. E. mixture.....	1	.....	1
Chloroform.....	65	37	102
Chloroform and ether.....	8	6	14
Ether.....	6	9	15
Ethyl chloride.....	2	.....	2
Ethyl chloride and chloroform.....	.....	1	1
Nitrous oxide.....	3	.....	3
Stovalne.....	3	.....	3
Kind not stated.....	54	39	93
Total.....	142	92	234

Gwathmey, James T.: American statistics of fatalities due to anæsthetics.—Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1912, p. 178-187.

Miller, Albert H.: Postoperative mortality from anæsthetics.—Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1912, p. 188-195.

Langlois and Desbouis: Rate of the pulmonary circulation during anæsthesia by chloroform or ether.—Compt. rend. Soc. Biol. 1912, v. 73, p. 467.

Leedham-Green: Chloroform is more toxic than ether, and particularly affects the myocardium, stomach, liver, and, in less degree, the kidneys.—Brit. M. J. 1912, v. 2, p. 237.

Apperly, R. E.: Chloroform has much more effect upon the kidney than ether and delays excretion.—Lancet, 1912, v. 182, p. 434. See also Fleming, A. L., p. 434.

Muskens, and others: Discussion on the after effects of chloroform.—Brit. M. J. 1912, v. 1, p. 368.

Rees, W. A.: Report of a case of delayed chloroform poisoning, associated with sepsis, in an active, wiry girl of 12 years with a good constitution.—Brit. M. J. 1912, v. 2, p. 1309.

Clark and Lindsay: Evidence is given that in rabbits the blood contains a larger proportion of chloroform in the plasma when the anæsthetic is given subcutaneously than when it is given as an inhalation.—Lancet, 1912, v. 183, p. 235.

McCrudden, Francis H.: The influence of chloroform narcosis on the heart of nephrectomized rabbits.—Arch. exper. Path. u. Pharmacol. 1912, v. 68, p. 160-162.

Doyon: Action of chloroform on the liver.—Compt. rend. Soc. Biol. 1912, v. 72, p. 26.

Apperly, R. E.: The effect of chloroform and ether on the liver and kidneys in health, and its significance in certain infective conditions.—Brit. M. J. 1912, v. 2, p. 624-627.

Mosiman and Whipple: Chloroform poisoning. Resistance of the pigeon, frog and terrapin to late chloroform poisoning.—Bull. Johns Hopkins Hosp. 1912, v. 23, p. 323–326.

Muskens, A. L. M.: Experimental observation of the after effects of chloroform.—N. York M. J. 1912, v. 95, p. 1384.

For additional references see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

CHONDRUS.

Needham, R. II.: Chondrus is almost unheard of outside of the materia medicas and National Formulary, where a single preparation is mentioned.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1345.

Schneider and Richter: The Ph. Germ. V restricts the ash content of Irish moss to 16 per cent; also restricts the presence of sulphurous acid.—Pharm. Zentralh. 1912, v. 53, p. 227.

Jensen, H. R.: A genuine sample ground in the laboratory left 19 per cent ash. An outside sample left an ash of 21.7 per cent, but had a normal gelatinizing value.—Evans's An. Notes, No. 7, 1912, p. 40.

CHROMII TRIOXIDUM.

Smith, Carl E.: The U. S. P. requires that when it is decomposed by heat, the residue obtained "should yield nothing soluble in water." This is too exacting, as other pharmacopœias allow from 0.5 to 1 per cent of alkali chromate.—J. Am. Pharm. Assoc. 1912, v. 1, p. 538.

Jensen, H. R.: Three samples of the purest quality contained 97 to 100 per cent anhydride; two of these, however, possessed an amount of sulphuric acid in excess of the official requirements.—Evans' An. Notes, No. 7, 1912, p. 21.

Mann, E. W.: The amount of chromic trioxide, CrO_3 , ranged from 39.52 to 99.21 per cent. Only one sample satisfied the requirements of the Pharmacopœia.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 39.

CHRYSAROBINUM.

McEwan, Donald: Chrysarobin, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

Smith, Carl E.: As medicinal chrysarobin is not the individual chemical substance so named by its discoverer but a mixture of a number, neither a chemical formula, exact solubility constants, nor a definite melting point can consistently be stipulated, as is done in the U. S. P.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1264.

Schneider and Richter: The Ph. Germ. V states that chrysarobin is soluble in 300 parts of boiling alcohol and permits 0.25 per cent of ash.—Pharm. Zentralh. 1912, v. 53, p. 234.

Lucas, E. W.: Directions should be given for removing the insoluble matter by decanting or straining.—*Chem. & Drug.* 1912, v. 80, p. 264.

Tutin and Clewer: The constituents of commercial chrysarobin.—*J. Chem. Soc. Lond.* 1912, v. 101, p. 290-304. Also *Pharm. J.* 1912, v. 88, p. 157.

Hesse, O.: The nature and the chemical composition of the chrysarobin of commerce.—*Ann. Chem.* 1912, v. 388, p. 65-96.

Léger, E.: The relation of chrysophanic acid and chrysarobin.—*J. pharm. et. chim.* 1912, v. 5, p. 588.

Léger, E.: Note on the constitution of chrysophanic acid.—*Compt. rend. Acad. sc.* 1912, v. 154, p. 281-283. See also *J. pharm. et. chim.* 1912, v. 5, p. 281-289.

Lemaire, Paul: The pharmaceutical compounds of chrysophanic acid actually employed in therapeutics differ in composition and activity.—*Répert. Pharm.* 1912, v. 24, p. 243-246.

Jensen, H. R.: Chrysophanic acid is a misnomer for the purer, brighter colored forms of chrysarobin of commerce, the true chemical substance not being in general use.—*Evans' An. Notes*, No. 7, 1912, p. 21.

CIMICIFUGA.

Henkel, Alice: While the black cohosh or black snakeroot does not seem to have been cultivated commercially, it is frequently grown in gardens for ornamental purposes.—*Drug. Circ.* 1912, v. 56, p. 133.

Truax, Florence Tippet: Among the drugs of the American materia medica which may be considered peculiarly Eclectic, *macrotys*, *cimicifuga racemosa*, or black cohosh, holds a conspicuous place.—*Nat. Eclect. M. Assoc. Quart.* 1912-1913, v. 4, p. 265.

Fisk, F. H.: *Macrotys* is the remedy for heavy, tensive, aching pains of the muscular tissue in any part of the body.—*Nat. Eclect. M. Assoc. Quart.* 1912-1913, v. 4, p. 341-343.

Fisk, F. H.: In acute and chronic inflammation of the uterus, *macrotys* is the "sheet anchor."—*Eclect. M. J.* 1912, v. 72, p. 333-335.

CINCHONA.

Editorial: Review of David Hooper's translation of van Gorkom's pamphlet on *Cinchona* in Java from 1872 to 1907.—*Brit. & Col. Drug.* 1912, v. 61, p. 489. See also p. 509.

Hooper, D.: On the introduction of *cinchona* into Java; Hasskarl in 1852 introduced 500 *Calisaya* seedlings from South America.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 454.

Editorial: Attention is called to the recent pamphlet by Abrahamsohn on the "Production of *Cinchona* Bark in Dutch East India."—*Pharm. J.* 1912, v. 89, p. 450.

Swain, Robert Lee: *Cinchona ledgeriana*, from which is obtained quinine, was named in joint honor of the Countess of Cinchon, wife of the Spanish viceroy of Peru, who was cured of tertian fever by means of this drug in 1638, and of Ledger, who obtained the seed from its native Bolivia.—Drug. Circ. 1912, v. 56, p. 63.

News Note: Upward of 9,139,662 kilos of Java cinchona bark were sold in Amsterdam during the year 1911.—Pharm. Weekblad, 1912, v. 49, p. 23.

Schneider and Richter: The Ph. Germ. V monograph for cinchona bark has been radically revised. The anatomical characteristics of the bark are described at length and the alkaloidal content is fixed at 6.5 per cent.—Pharm. Zentralh. 1912, v. 53, p. 286–287.

Daels, Felix: Method for the estimation of total alkaloids in powdered cinchona.—J. pharm. Anvers, 1912, v. 68, p. 540.

Caesar & Loretz: An outline of Fromme's method for assay of cinchona and the alkaloid content requirements included in the several pharmacopœias.—Jahres-Ber. 1912, p. 114–117.

Dohme and Engelhardt: The Fromme process gives satisfactory results.—J. Am. Pharm. Assoc. 1912, v. 1, p. 599.

Lefeldt, M.: The gravimetric method of assay for cinchona is preferable to the titrimetric.—Pharm. Ztg. 1912, v. 57, p. 371.

Kleinstuck, Martin: The titrimetric valuation of cinchona bark.—Pharm. Zentralh. 1912, v. 53, p. 643–651, 680–684, 705–718.

J. D. Riedel, A.-G.: The method of assay as given in the Ph. Germ. V is considered unsatisfactory, giving as much as 3 per cent less alkaloid than the method outlined by Fromme, which is included in the Ph. Helv. IV.—Riedel's Berichte, 1912, p. 39. See also Südd. Apoth.-Ztg. 1912, v. 52, p. 182.

Richter, Erw.: The assay of cinchona bark by the Ph. Germ. V method and the method for the titrimetric determination of quinine by means of picric acid.—Apoth.-Ztg. 1912, v. 27, p. 949–950, 960–961.

Caesar & Loretz: A comparative assay of cinchona according to the methods proposed by Katz and by Fromme, shows that the latter yields uniformly higher results.—Jahres-Ber. 1912, p. 28–32.

Dohme and Engelhardt: Bibliographic list of 76 titles on the assay processes for cinchona.—Eighth Internat. Cong. Appl. Chem. 1912, v. 17, p. 21–22.

Madsen, H. P.: The examination of cinchona bark and of galenical preparations.—Arch. Farm. og Chemie, 1912, v. 19, p. 322–335.

Rabe, Paul: Contribution to the knowledge of cinchona alkaloids.—Ber. deutsch. chem. Gesellsch. 1912, v. 45, p. 2163–2171.

Vanderkleed, Chas. E.: The assay of 10 samples of cinchona varied from 6.930 to 11.350 per cent of total alkaloids; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Dohme and Engelhardt: In 1906, 42 per cent; 1907, 38 per cent; 1908, 60 per cent; 1910, 33.2 per cent of the samples of cinchona calisaya submitted assayed 5 per cent of total alkaloids.—J. Am. Pharm. Assoc. 1912, v. 1, p. 100.

Gehe & Co.: The average alkaloidal content of the cinchona barks marketed in 1911 was 6.59, as compared with 6.38 per cent in 1910.—Handelsbericht, 1912, p. 57–62.

Grutterink, Alide: The microchemistry of cinchona alkaloids, with several illustrations.—Ztschr. anal. Chem. 1912, v. 51, p. 215–225.

J. D. Riedel, A.-G.: The ash content of cinchona calisaya was found to vary from 1.9 to 4.4 per cent.—Riedel's Berichte, 1912, p. 51.

Diekman, George C.: In 3 samples of fluid extract of cinchona the alkaloid content varied from 2.80 to 4.20.

Dichgans, H.: The assay of the Ph. Germ. V extractum chinae fluidum.—Apoth.-Ztg. 1912, v. 27, p. 193–194.

Schreiber, Richard: A report of comparative results obtained with fluid extracts of cinchona made from the same sample of bark according to the methods in several pharmacopœias. The bark assayed 6.2 per cent of total alkaloids. The alkaloid content of the resulting fluid extracts varied from 3.28, when made according to the U. S. P. process, to 5.27, when made according to the modification of the Ph. Germ. V process proposed by the author.—Apoth.-Ztg. 1912, v. 27, p. 601–602, 617–618.

Hommell, P. E.: The proposed formula for a liquid extract of cinchona N. F. has not proven satisfactory.—Proc. New Jersey Pharm. Assoc. 1912, p. 94. See also Caldwell, Paul: Drug. Circ. 1912, v. 56, p. 69, and De Jonge, Cornelius: J. Am. Pharm. Assoc. 1912, v. 1, p. 272.

Yeager, William H.: The homœopathic relationship of cinchona to cases of anæmia.—Hahnemann. Month. 1912, v. 47, p. 412.

For additional references see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

CINCHONA RUBRA.

Dohme and Engelhardt: All the samples of red cinchona submitted during 1906, 1908, and 1911 came up fully to the official strength; of those submitted in 1907, 20 per cent; in 1909 (35 samples examined), 8.6 per cent; and in 1910, 10 per cent were rejected.—J. Am. Pharm. Assoc. 1912, v. 1, p. 101.

J. D. Riedel, A.-G.: The ash content of red cinchona was found to vary from 1.9 to 4.6 per cent.—Riedel's Berichte, 1912, p. 49.

CINCHONIDINÆ SULPHAS.

Smith, Carl E.: As the melting point is affected by the presence of small variable quantities of other cinchona alkaloids, it has little value as a test of identity or of purity.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1264.

Grutterink, Alide: The microchemistry of cinchonidine, with several illustrations.—*Ztschr. anal. Chem.* 1912, v. 51, p. 222. See also *Chem. Weekblad*, 1912, v. 9, p. 157.

Blackader, A. D.: All the salts of quinine have a value, but cinchonine and cinchonidine are much weaker and have no advantage.—(*Canadian M. Assoc. J.* v. 2, No. 10.)—*J. Am. M. Assoc.* 1912, v. 59, p. 1652.

CINCHONINÆ SULPHAS.

Smith, Carl E.: In the requirement regarding solubility in chloroform "80 parts" are to be regarded as volume parts, i. e., 8 cc., not gm., should apply to this test.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1264.

Grutterink, Alide: The microchemistry of cinchonine.—*Chem. Weekblad*, 1912, v. 9, p. 156-157.

Biddle, H. C.: The conversion of cinchonine and quinine into their poisonous isomers, cinchotoxine and quinotoxine, and the relation of this conversion to the toxicity of the cinchona alkaloids.—*J. Am. Chem. Soc.* 1912, v. 34, p. 500-515, and *Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 526-528. See also Rabe, P., *Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 1447-1449.

CINNALDEHYDUM.

Delphin, T.: A correction factor for cinnamic aldehyde. The refractive index furnishes a valuable clue to its adulteration. All substances which are apt to be substituted for it will lose this readily.—*Svensk farm. Tidskr.* 1912, v. 16, p. 293-295.

COCA.

Richter, R.: The Ph. Germ. V directs that coca leaves be obtained from *Erythroxylum coca* Lamareck. Coca is now being cultivated in the East Indies, Java, Ceylon, and Kamerun.—*Pharm. Zentrallh.* 1912, v. 53, p. 502.

Anon.: Coca is cultivated in Peru, Netherlands, India, Bolivia, Ceylon, British India, Straits Settlements and Federated Malay States, and Mexico. In Peru, Bolivia, and Mexico the coca shrub or tree is indigenous.—*Pharm. Weekblad*, 1912, v. 49, p. 980-984.

Anon.: In 1904, Java sent 57,000 pounds of coca leaves to Holland and Germany, which handle the entire output. In 1908, the exporta-

tion reached the enormous figure of 1,026,000 pounds.—Pharm. Era 1912, v. 45, p. 311.

Rusby, H. H.: Huanuco coca leaves may be brown without detriment to their quality, but the same color in Truxillo coca leaves is to be regarded as a sure indication of serious deterioration.—J. Am. Pharm. Assoc., 1912, v. 1, p. 951.

Gehe & Co.: Bolivian and Cuzco coca leaves were not common on the European market.—Handelsbericht, 1912, p. 65–66.

Rutter, Frank R.: Comment on the need of some practical method of drying coca leaves at Cuzco, Peru, where the operation is primitive in the extreme.—Cons. & Tr. Rep. June 7, 1912, p. 987.

Schamelhout, A.: The supplement to the Ph. Belg. III gives the name and botanical origin of coca leaves. Macroscopic and microscopic description should be added.—Bull. Soc. roy. Pharm. Bruxelles, 1912, v. 56, p. 266.

J. D. Riedel, A.-G.: The ash content of coca was found to vary from 4.5 to 7.8 per cent.—Riedel's Berichte, 1912, p. 49.

Patch, Edgar L.: Truxillo coca yielded 13.5 per cent ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

Dohme and Engelhardt: This drug assays always in the neighborhood of 1 per cent ether soluble alkaloids, and very rarely was there an occasion to reject samples.—J. Am. Pharm. Assoc. 1912, v. 1, p. 101.

Gaze, R.: The assay of a sample of coca leaf gave a total of 1.04 per cent of alkaloid. At the end of 18 months the same drug assayed 1.14 per cent, probably due to the further drying out of the sample.—Apoth.-Ztg. 1912, v. 27, p. 402.

Dohme and Engelhardt: The percolation process should be abandoned in the assay method. Keller's method, using plain ether, gives very satisfactory results.—J. Am. Pharm. Assoc. 1912, v. 1, p. 600.

Caesar & Loretz: An outline of the Keller-de Jong method of assay for coca, with the requirements made in several pharmacopœias.—Jahres-Ber. 1912, p. 137–138.

Schamelhout, A.: As in the case of aconite, Dulière recommends hæmatoxylon rather than iodeosin as an indicator.—Bull. Soc. roy. Pharm. Bruxelles, 1912, v. 56, p. 267.

Vanderkleed, Chas. E.: The assay of 4 samples of coca leaves varied from 0.709 to 1.055 per cent of alkaloids; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

COCAINA.

Richter, R.: Cocaine was discovered by Niemann in 1860 in Wöhler's laboratory, but it was not until 1884 that its practical use as a local anæsthetic was discovered by Köller.—Pharm. Zentrallh. 1912, v. 53, p. 503.

Editorial: Brief review of the production of coca and cocaine in Java, with tabulated summaries of the monthly exports of coca leaves for 1910-11 and the first 6 months of 1912.—*Brit. & Col. Drug.* 1912, v. 62, p. 256. See also v. 61, p. 571.

Editorial: Brief review of cocaine manufacture in Peru as described by Sperber. (*Der Tropenpflanzer*).—*Chem. & Drug.* 1912, v. 80, p. 89.

Gehe & Co.: Of the 4,040 kilos of crude cocaine on hand and imported into Hamburg in 1911 only 2,417 kilos were sold, leaving an available supply of 1,634 kilos on January 1, 1912.—*Handelsbericht*, 1912, p. 128.

Smith, Carl E.: The melting point of the U. S. P. is one given by some authorities as that of the chemically pure alkaloid. Some variation should be allowed for the medicinal product, probably 96° to 98°.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1264.

Bernegau and E'Ve.: For the identification of cocaine hydrochloride, a strong solution of cocaine hydrochloride in diluted HCl is necessary in applying the potassium chromate test.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 123.

Fuller, H. C.: The separation and identification of small quantities of cocaine.—*Bull. Bur. Chem. U. S. Dept. Agric.* 1912, No. 150, p. 41-43. See also *Merck's Rep.* 1912, v. 21, p. 239.

Richter, R.: A table showing the comparative reactions of cocaine and of stovaine.—*Pharm. Zentrallh.* 1912, v. 53, p. 1190.

Scherbatschew, D.: The differentiation between cocaine and other cocaine-like substances.—*Apoth.-Ztg.* 1912, v. 27, p. 441.

Grutterink, Alide: The microchemical examination of coca alkaloids, with several illustrations.—*Ztschr. anal. Chem.* 1912, v. 51, p. 208-215. See also *Chem. Weekblad*, 1912, v. 9, p. 148-152.

Putt, Earl B.: Some microchemical tests for cocaine, with illustrations.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 511.

Denigès, G.: A novel reaction of cocaine, applicable to microcrystalline research.—*Bull. Soc. pharm. Bordeaux*, 1912, v. 52, p. 385-390.

Farmer, Alfred G.: Boiling a 1 per cent solution of cocaine immediately before injection does not interfere with its anæsthetic action.—*J. Am. M. Assoc.* 1912, v. 58, p. 1135.

Holbrook, D. M.: If a trace of cocaine were decomposed by boiling, it would be replaced by a trace of benzoyl-ecgonin, therefore the utmost harm that could follow would be an inappreciable reduction of the dose.—*J. Am. M. Assoc.* 1912, v. 58, p. 721.

Bainbridge, William Seaman: Spinal analgesia, development and present status of the method, with brief summary of personal experience in 1,065 cases. A method of preparing a sterile cocaine solution is outlined.—*J. Am. M. Assoc.* 1912, v. 59, p. 1855-1859. See also *Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 224-239.

Morrow, Albert S.: As a rule, cocaine is used in solutions of too great strength; weak solutions have been found quite as effective and less toxic.—*N. York M. J.* 1912, v. 95, p. 329-332.

Editor, "Therapeutics": Pharmacology of coca, its official preparations, and synthetic and other substitutes.—*J. Am. M. Assoc.* 1912, v. 58, p. 479-481.

Lydston, G. Frank: The application of cocaine in chaneroid and sluggish ulcers gives successful results, aside from its anæsthetic properties.—*J. Am. M. Assoc.* 1912, v. 58, p. 551.

Colton, James A.: The dental inspector of the public schools in Providence, R. I., reports the cases of three boys of grammar-school age who have become pronounced cocaine victims from the employment of this drug to relieve suffering from dental disease.—*Dental Cosmos*, 1912, v. 54, p. 1185.

Owens, W. D. (U. S. N.): Signs and symptoms presented by those addicted to cocaine.—*J. Am. M. Assoc.* 1912, v. 58, p. 329.

Anon.: Coroner's inquest on the death of a dentist from a large overdose of cocaine.—*Pharm. J.* 1912, v. 88, p. 76. See also v. 89, p. 254.

Indian Correspondent: The Ceylon Government has appointed a committee to decide what steps should be taken to arrest the abuse of cocaine in Ceylon.—*Chem. & Drug.* 1912, v. 80, p. 800.

McKenzie, Robert H.: Public attention is attracted to the evils of cocaine, and pharmacists should unite in an effort to check or stop the traffic of this soul wrecking and death dealing drug.—*Rocky Mountain Druggist*, 1912, v. 26, July, p. 17.

Lilly, J. K.: It does not seem to be right and proper to oppose legislation designed to regulate the wrongful use of cocaine.—*Proc. N. A. M. M. P.* 1912, p. 68.

Freudenthal, Wolff: We have learned to be on our guard against toxic effects of cocaine and its derivatives. Several fatal cases are reported.—*Med. Rec.* 1912, v. 82, p. 111.

For additional references see *Index Med.*, *Zentralbl. Exper. Med.*, *J. Am. M. Assoc.*, *Chem. Abstr.*, and *Chem. Zentralbl.*

COCCUS.

Kitchen, W. W.: It is reported that 16,999 pounds of cochineal were exported from Teneriffe to the United States in 1910, and 16,577 pounds in 1911.—*Cons. & Tr. Rep.* June 5, 1912, p. 952.

Gane, E. H.: The silver variety of cochineal is gradually disappearing and better grades are more easily obtainable.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 375.

Gehe & Co.: The increasing reduction in the production of cochineal has entailed a marked increase in the price of this article.—*Handelsbericht*, 1912, p. 161.

Dohme and Engelhardt: It is advisable to include in the U. S. P. a determination of the color strength of cochineal, also an estimation of the moisture.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 600.

Caesar & Loretz: An outline of the tests used and the limitations for ash included in the several pharmacopœias.—*Jahres-Ber.* 1912, p. 113-114.

North, Horace: Of 11 lots examined in the course of 4 years, 6 whole, 5 powdered, the ash content of the former was, highest, 4.28; lowest, 3.29; and of the latter, highest, 6.44; lowest, 4.19.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 24.

Rippetoe and Minor: Two samples of powdered cochineal contained 3.60 and 4.97 per cent of ash respectively.—*Am. J. Pharm.* 1912, v. 84, p. 438.

CODEINA.

Ferrein, Friedrich: Codeine was discovered by Robiquet in 1833, its physiological properties were determined by Kunckel, and its chemical relationship to morphine was determined by Matthiessen and Wright in 1869.—*Arb. pharm. Inst. Univ. Berl.* 1911, 1912, p. 154.

Smith, Carl E.: Because of decomposition at temperatures below that given as the melting point, determination of this is valueless.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1265.

Mindes, J.: Reports several characteristic reactions for codeine hydrochloride.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 93.

Putt, Earl B.: Some microchemical tests for codeine; with illustrations.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 509.

Knorr and Hartmann: Method for the production of ethers from pseudo-codeine.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 1354-1358. See also Pschorr and Dickhäuser: p. 1567-1570.

Chase, Sara T.: Codeine is used with good results in diabetes, both mellitus and insipidus, as it lessens the excretion of urine and the output of sugar.—*Am. J. Clin. Med.* 1912, v. 19, p. 84.

Kinne, J. B.: Report of unusual tolerance to codeine on the part of a child.—*J. Am. M. Assoc.* 1912, v. 58, p. 213.

Editor: Codeine, while far less dangerous than morphine, is most assuredly a habit-forming drug.—*Am. J. Clin. Med.* 1912, v. 19, p. 1034.

Terry, Charles E.: While only 2 or 3 of the cases reported use codeine, a number have acquired the habit of the stronger drug through the prescribing of codeine.—*Rep. Jacksonville, Florida, Bd. Health*, 1912, p. 27.

CODEINÆ PHOSPHAS.

Derlin, L.: Commercial samples of codeine phosphate were found to contain from 6.2 to 6.4 per cent of water. The Ph. Germ. V re-

quires that it contain not more than 8.5 and not less than 8.2 per cent.—Apoth.-Ztg. 1912, v. 27, p. 806.

Wollschlaeger, E.: Reports a sample of codeine phosphate that was partially insoluble in water; contaminated with calomel.—Pharm. Ztg. 1912, v. 57, p. 544. See also p. 785, and Hackenberg, p. 521.

Smith, Carl E.: Codeine phosphate effloresces rapidly at ordinary temperatures, losing all except $\frac{1}{2}$ molecule of its crystal water. This makes it difficult to prepare it with fully 2 molecules of water (8.3 per cent).—J. Am. Pharm. Assoc. 1912, v. 1, p. 1265.

CODEINÆ SULPHAS.

Williams, J. B.: Five samples of morphine sulphate examined were found to contain from 0.9 to 7.0 per cent codeine sulphate.—Am. J. Pharm. 1912, v. 84, p. 391-393.

COLCHICI CORMUS.

Henkel, Alice: The usual method of propagation is by planting the bulbs about August or September in deep rich soil, about two or three inches below the surface, and about three inches apart in the row.—Drug. Circ. 1912, v. 56, p. 134.

Swain, Robert Lee: Colchicum is named from Colchis, a province of ancient Asia Minor.—Drug. Circ. 1912, v. 56, p. 63.

J. D. Riedel, A.-G.: The ash content of colchicum was found to vary from 2.4 to 2.7 per cent.—Riedel's Berichte, 1912, p. 50.

Caesar & Loretz: An outline of the Keller-Panchaud method of assay for colchicum.—Jahres-Ber. 1912, p. 158-159.

Dohme and Engelhardt: The present assay methods are absolutely wrong; the residue calculated as colchicine contains only about 50 per cent of the alkaloid. The assay processes should be thoroughly revised.—J. Am. Pharm. Assoc. 1912, v. 1, p. 600.

Jensen, H. R.: One sample was assayed by the method of Farr and Wright, and the alkaloid after special desiccation was found to reach 0.28 per cent by weight.—Evans' An. Notes, No. 7, 1912, p. 25.

Dohme and Engelhardt: The conditions up to 1909 seem to have been favorable for the growth of colchicum, only 16.5 per cent of the samples examined being below the official strength, while, in 1910, 68 per cent of the samples had to be rejected as inferior.—J. Am. Pharm. Assoc. 1912, v. 1, p. 101.

Vanderkleed, Chas. E.: The assays of 9 samples of colchicum root varied from 0.348 to 0.528 of colchicine; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Gregory, Wm. M.: Prompt relief obtained from the treatment of acute rheumatism and arthritis by colchicine.—Am. J. Clin. Med. 1912, v. 19, p. 435.

COLCHICI SEMEN.

Dohme and Engelhardt: Although the present official assay method gives entirely too high results, the greater percentage of the samples submitted did not come up to the standard obtained by this method.—

J. Am. Pharm. Assoc. 1912, v. 1, p. 101.

Gane, E. H.: One sample contained but 0.36 per cent colchicine.—

J. Am. Pharm. Assoc. 1912, v. 1, p. 375.

Patch, E. L.: One lot of colchicum seed assayed 0.52 per cent.—J.

Am. Pharm. Assoc. 1912, v. 1, p. 375.

Vanderkleed, Chas. E.: The assays of 1 sample of colchicum seed yielded 0.784 per cent of colchicine.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Seoville, Wilbur L.: Of 14 assays of colchicum seed during the past 6 to 10 years, 7 were below 0.56 per cent, 4 between 0.56 and 0.76 per cent. and 3 were above 0.76 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1341.

Jensen, H. R.: A sample of colchicum seed, assayed by the method of Farr and Wright, was found to contain 0.5 per cent of colchicine.—Evans' An. Notes, No. 7, 1912, p. 25.

COLCHICINA.

Smith, Carl E.: The term "leaflets" in the description may lead to the inference that the alkaloid is crystalline, which is not the case. An unofficial crystalline colchicine, containing chloroform of crystallization, however, is on the market.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1265.

Gehe & Co.: The limited use of colchicine has materially restricted fluctuation in the price of this article.—Handelsbericht, 1912, p. 130.

Chase, Sara T.: Colchicine has served well in the beginning of rheumatic fever and in acute gouty conditions.—Am. J. Clin. Med. 1912, v. 19, p. 86.

COLLODIUM.

Smith, Carl E.: The U. S. P. gives neither descriptions nor tests, which are important to those who do not make this solution themselves.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1265.

Schneider and Richter: The Ph. Germ. V now requires a determination of the pyroxylin content; 4 per cent.—Pharm. Zentralh. 1912, v. 53, p. 286.

Brown, Linwood A.: Eleven samples analyzed; three deficient in pyroxylin, being apparently made by the 1890 U. S. P.—Proc. Kentucky Pharm. Assoc. 1912, p. 48.

Patch, E. L.: Two lots contained only 75 per cent of the official amount of soluble gun cotton.—J. Am. Pharm. Assoc. 1912, v. 1, p. 375.

Wiebelitz: A sample of collodion was found to contain appreciable quantities of camphor. Evidently the commercial product used for lacquering metallic articles.—*Pharm. Ztg.* 1912, v. 57, p. 596.

Smith, F. A. Upsher: Collodion has recently been applied most successfully to the treatment of boils.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 841.

COLLODIUM FLEXILE.

Schneider and Richter: The Ph. Germ. V omits turpentine from the formula.—*Pharm. Zentralh.* 1912, v. 53, p. 286.

COLOCYNTHIS.

Power, Frederick B.: Colocynth or bitter apple has been known and used medicinally from the earliest times.—*Am. J. Pharm.* 1912, v. 84, p. 148-151.

Rusby, H. H.: The suggested omission of the word "peeled" from the definition, so that the Federal authorities will hereafter be compelled to prevent the importation of this drug, all of which is peeled, is disapproved.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 952.

Gane, E. H.: Most of the product sold contains seed as well as pulp, and prosecutions have been brought on this account.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 375.

Rippetoe and Minor: An examination of 7 samples of pulp showed from 96.93 to 99.61 per cent of pulp, 0.14 to 1.27 per cent seed, and 0.25 to 1.80 per cent of peel.—*Am. J. Pharm.* 1912, v. 84, p. 196-200.

Rusby, H. H.: Three lots contained ground seeds.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 375.

North, Horace: The pulp may now be purchased free from seeds. A sample recently examined yielded 13.26 per cent of ash and 1.65 per cent soluble in petroleum ether.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 24.

Mann, E. W.: Seven samples of pulp proved to be free from any considerable admixture with seeds. The actual figures were: Ash, 10.48 to 13.31 per cent; ether soluble matter, 2.64 per cent.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 11.

Rippetoe and Minor: Eleven samples of colocynth examined contained from 1.96 to 13.03 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 438.

J. D. Riedel, A.-G.: The ash content of colocynth was found to vary from 5.4 to 8.5 per cent.—*Riedel's Berichte*, 1912, p. 49.

Glücksman, C.: On the identity reactions of extract of colocynth.—*Pharm. Praxis*, 1912, v. 11, p. 215-220.

CONDURANGO.

Schneider and Richter: The Ph. Germ. V gives the origin of condurango as probably *Marsdenia condurango* Reichenbach fil.—Pharm. Zentrallh. 1912, v. 53, p. 318.

J. D. Riedel, A.-G.: The ash content of condurango was found to vary from 9.5 to 12.1 per cent.—Riedel's Berichte, 1912, p. 49.

Amort and Rothe: In the valuation of fluid extract of condurango, the estimation of tannin and of nitrogen, in addition to the specific gravity and extract content, will give valuable information.—Pharm. Ztg. 1912, v. 57, p. 175-176.

Mercer, B. W.: Condurango will be found of service in catarrhal gastritis with extreme atonicity and threatened ulceration.—Eclectic M. J. 1912, v. 72, p. 463-465.

CONIUM.

Mitlacher, Wilhelm: Observations on the cultivation of *Conium maculatum*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 385.

Anon.: *C. maculatum* flourishes in a rich soil and will grow to a height of 3 ft.; it likes plenty of moisture and does well in a partly shaded situation.—Brit. & Col. Drug. 1912, v. 62, p. 253.

Dohme and Engelhardt: The assay method for conium seed should be revised. It is very cumbersome and could easily be replaced by a more expeditious process.—J. Am. Pharm. Assoc. 1912, v. 1, p. 600.

Vanderkleed, Chas. E.: The assays of 3 samples of conium fruit varied from 0.513 to 0.611 per cent of coniine; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

CONVALLARIA.

Mitlacher, Wilhelm: Observations on the cultivation of *Convallaria majalis*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 384.

Rusby, H. H.: No provision for the presence of stems or foreign roots, which will exclude this drug from the country, is included in the proposed U. S. P. monograph.—J. Am. Pharm. Assoc. 1912, v. 1, p. 952.

Hamilton, H. C.: Table showing the relation of the minimum lethal dose unit to the heart tonic unit.—Am. J. Pharm. 1912, v. 84, p. 102-103.

COPAIBA.

Tunmann, O.: The chief source of copaiba is Venezuela, the exports from Maracaibo in 1907 aggregating 71,732 kilogrammes. Colombia and Brazil also export considerable quantities of this balsam.—Apoth.-Ztg. v. 27, p. 60.

Tunmann, O.: The chief source of gurjun balsam is Burmah and Cochin-China, the bulk of the drug being exported from Saigon.—Apoth.-Ztg. 1912, v. 27, p. 70.

Kebler, L. F.: The pharmacopœial standard for copaiba is decidedly inadequate, largely for the reason that we know so little about the actual composition of this commodity.—Am. J. Pharm. 1912, v. 84, p. 502. Also J. Am. Pharm. Assoc. 1912, v. 1, p. 1405.

Anon.: The test for gurjun in copaiba is too delicate for use in inexperienced hands. (Drug Topics)—J. Am. Pharm. Assoc. 1912, v. 1, p. 499.

Bernegau and E'We.: Copaiba rarely answers the requirement for solubility in petroleum benzin.—J. Am. Pharm. Assoc. 1912, v. 1, p. 123.

Caesar & Loretz: An outline of the tests used for copaiba, with an enumeration of the requirements included in the several important pharmacopœias.—Jahres-Ber. 1912, p. 108.

North, Horace: Twenty-one samples examined yielded a specific gravity at 25° varying between 0.9341 and 0.9910, ester value between 3 and 14. The oil gave a specific gravity of 0.8890 to 0.9148, optical rotation of -60.12° to $+13.11^{\circ}$.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 24-28.

Wijnne, A. J.: Several samples of balsam of copaiba examined for gurjun balsam gave with sodium nitrite a slight violet coloration, differing in intensity, however, from that observed when gurjun balsam was present.—Pharm. Weekblad, 1912, v. 49, p. 205.

McKeogh, R. P.: Ten samples were free from fixed oils, turpentine, and paraffin oils, but eight of them contained gurjun balsam.—J. Am. Pharm. Assoc. 1912, v. 1, p. 499.

Schimmel & Co.: The oil content of the imports of Para copaiba balsam leave much to be desired.—Semi-Annual Report, 1912, p. 58.

Caesar & Loretz: Few products are adulterated so extensively as is copaiba.—Jahres-Ber. 1912, p. 14-20.

Cocking, T. Tusting: Tabulated summary of the optical rotation of a number of fractions of genuine copaiba and of a number of fractions of oil which contained from 5 to 6 per cent of gurjun oil.—Chem. & Drug. 1912, v. 80, pp. 128, 204.

Parry, Ernest J.: Before the adoption of any optical rotation test it is necessary that a large number of samples of oils, distilled from various copaibas by means of steam, should be very carefully examined. The results of Cocking and others show enormous differences.—Chem. & Drug. 1912, v. 80, p. 19.

Jensen, H. R.: The so-called Cocking's generalization, for the detection in particular of admixed African oil, would seem to be under some suspicion.—Evans' An. Notes, No. 7, 1912, p. 27.

Hymans, Herbert: The statement of Edward Evans, that balsam of copaiba from South America has been found adulterated with African copaiba, sent there no doubt from America for the purpose of adulteration, is challenged.—Chem. & Drug. 1912, v. 81, 319. Evans Replies, p. 349.

Utech, P. Henry: Powdered soap may be used in preparing emulsions of balsam of copaiba with very satisfactory results.—J. Am. Pharm. Assoc. 1912, v. 1, p. 474.

CORIANDRUM.

Anon.: The importation of coriander seeds into the United States during 1910 amounted to 1,386,064 pounds; in 1911, 1,069,099 pounds.—Cons. & Tr. Rep. May 13, 1912, p. 583.

Kremers, Edward: After the oil has been distilled out, the seed contains 15 to 20 per cent of fatty oil that will yield a fine soap, and as a rule enough of the coriander oil remains to impart a fragrance thereto.—Proc. N. W. D. A. 1912, p. 193.

Rippetoe and Minor: Two samples of coriander examined contained 5.49 and 7.20 per cent of ash, respectively.—Am. J. Pharm. 1912, v. 84, p. 439.

Mann, E. W.: Three samples of powdered coriander yielded 5.17, 6.09, and 6.43 per cent of ash, respectively.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 11.

CREOSOTUM.

Pritchard, Thomas W.: Some recent developments in wood distillation. Millions of cords of wood allowed to go to rot are capable of yielding valuable products.—Sc. Am. Suppl. 1912, v. 74, p. 358-359. Also Chem. Trade J. 1912, v. 50, p. 595.

Ford, Charles M.: Warning against a product bearing the label "Creosote" in large letters, and in much smaller letters the words "from coal tar."—Proc. Nebraska Pharm. Assoc. 1912, p. 107.

England, Joseph W.: The tests of the U. S. P. VIII for creosote are indefinite and unsatisfactory.—J. Am. Pharm. Assoc. 1912, v. 1, p. 303.

Smith, Carl E.: The statements that a solution in 140 parts of water is not perfectly clear and that a solution in 120 parts of hot water becomes turbid on cooling, the latter being given as a test of distinction from, and absence of, "coal-tar creosote," should be omitted from the U. S. P. IX.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1266.

Bernegau and EWe.: In the test for solubilities the sentence, "Soluble in all proportions in acetic acid" should be read, "Soluble

in all proportions in glacial acetic acid."—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 124.

North, Horace: Certain manufacturers now take sufficient pains to furnish an article strictly U. S. P.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 30.

J. D. Riedel, A.-G.: A slight acid reaction of creosote is common and is generally recognized in pharmacopœias.—*Riedel's Berichte*, 1912, p. 39; also *Südd. Apoth.-Ztg.* 1912, v. 52, p. 183.

Brown, Linwood A.: Nine samples analyzed; all conformed to U. S. P.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 48.

Jensen, H. R.: Of 22 samples it was necessary to reject 5 which were apparently deficient in guaiacol, having specific gravity, 1.075 to 1.0765; refractive index, 1.538 to 1.539.—*Evans' An. Notes*, No. 7, 1912, p. 29.

Vanderkleed and Heidelberg: The determination of creosote in tablets, with an outline of the methods for assaying plain and gelatin coated tablets.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 301-303. Also *Apothecary* 1912, v. 24, Aug. p. 30.

Fishberg, Maurice: The indications and contraindications for creosote in tuberculosis.—*Merck's Arch.* 1912, v. 14, p. 387-388.

v. Gieson and Lynah: Creosote and calcium medication in respiratory affections in children and in pulmonary tuberculosis; Russell's generalization in tuberculosis; with tabulated summary of 52 cases.—*Med. Rec.* 1912, v. 81, p. 883-890.

Powell and Hartley: Remedies of the creosote class are of very doubtful value during the acute and actively hectic periods of phthisis.—*Am. J. Clin. Med.* 1912, v. 19, p. 518.

Charitschkoff, K. W.: Antiseptic properties of creosote.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 456.

CRESOL.

Dwyer, W. J.: Creosote oil is the largest item of import into the United States of the coal-tar classification during 1911; 49,311,223 gals., used mostly in wood preserving.—*Chem. Trade J.* 1912, v. 55, p. 222.

Smith, Carl E.: The composition of market products is very variable. Only a minor portion of a large number examined came within a reasonable interpretation of the U. S. P. requirements.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1266.

Schneider and Richter: The Ph. Germ. V requirements for cresol are decidedly more stringent than were those of the Ph. Germ. IV.—*Pharm. Zentrallh.* 1912, v. 53, p. 338.

Lucas, F.: The valuation of cresol according to the Ph. Germ. V.—*Apoth.-Ztg.* 1912, v. 27, p. 963.

Gibbs, H. D.: The action of sunlight upon phenolic compounds and anilin.—*J. Am. Chem. Soc.* 1912, v. 34, p. 1190-1207.

Zinke and Gaebel: Report of a chemical study on condensation products of *m*- and *p*-cresol with acetone.—*Ann. Chem.* 1912, v. 388, p. 299-312.

Pence, C. M.: The bromine and iodometric methods for the volumetric determination of cresol.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 518-520.

Gane, E. H.: One lot of cresol was rejected because it contained a large percentage of phenol.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 499.

Raschig, F.: Presents a comprehensive review of the scientific and technical importance of the tar phenols. J. Schenkel was the first to discover that crude tar distillates, containing approximately 33 per cent of phenols, could be made miscible with water by the addition of rosin soap.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 670-671, 678-679.

Anon.: An examination of 12 samples of the Ph. Germ. V cresol soap solution showed a variation of from 34 to 54 per cent of cresol, 22 to 40 per cent of soap, and 14.5 to 37 per cent of water.—*Pharm. Ztg.* 1912, v. 57, p. 196.

Hellriegel, A.: The examination of the compound cresol solution of the Ph. Germ. V, and the detection of inferior products.—*Apoth.-Ztg.* 1912, v. 27, p. 893-894.

Muset, J.: The determination of cresol in cresol soap solutions.—*Ann. Pharm. Louvain*, 1912, v. 18, p. 383. See also Magnus F., p. 487-489; Duliére, Walter, p. 539-540; and reply by Muset, J., p. 540-541.

Schmatolla, Otto: The composition of commercial cresol soap solutions and the precautions necessary in making the official Ph. Germ. V preparation.—*Pharm. Ztg.* 1912, v. 57, p. 270-271.

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Havenhill, L. D.: Twelve, of the 14 samples of elixir of iron, quinine, and strychnine phosphate examined, were deficient in alkaloidal strength.—*Proc. Kansas Pharm. Assoc.* 1912, p. 61.

Sayre, L. E.: Five samples of elixir of iron, quinine, and strychnine examined were below standard.—*Bull. Kansas Bd. Health*, 1912, v. 8, p. 103.

Tilford, J. Floyd: Of 3 samples of elixir of iron, quinine, and strychnine examined, 2 were illegal.—*Rep. Kansas Bd. Health*, 1912, p. 113.

ELIXIRIA N. F.

Floyd, Henry B.: The City of Washington Branch recommends that a definition for the term elixir be made a part of the National Formulary.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 276.

Hommell, P. E.: The percentage of alcohol should be reduced as far as possible in case of saline elixirs, but not in tonic elixirs.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 95.

Pritchard, B. E.: The keeping qualities of low alcoholic elixirs should be thoroughly tested before formulas are included in the National Formulary.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 194.

Osborne, Oliver T.: We do not need an elixir that contains alcohol or a lot of glycerin.—*J. Am. M. Assoc.* 1912, v. 59, p. 1161.

Hommell, Philemon E.: Aside from the N. F. pepsin elixirs, which are of doubtful value, but few should be deleted.—*Merck's Rep.* 1912, v. 21, p. 32.

Saalbach, Louis: The elixirs are too numerous to mention.—*N. A. R. D. Notes*, 1912, v. 14, p. 519.

Elixir of Almond Compound: Compound almond elixir may be used in disguising the taste of the bromides and iodides and the saline salts.—White, William R., *J. Am. Pharm. Assoc.* 1912, v. 1, p. 515.

The City of Washington Branch of the A. Ph. A. criticizes the pronounced vanillin odor and taste of elixir of bitter almond.—*Drug. Circ.* 1912, v. 56, p. 157.

Hommell, P. E.: Elixir of almond compound is entirely too sickening and may tend to disturb many sensitive stomachs.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 92.

Elixir of Buchu would be decidedly improved by replacing the sirup with glycerin. To the formula for compound elixir of buchu, 4 fluid ounces of glycerin should be added.—Hommell, Philemon E., *Merck's Rep.* 1912, v. 21, p. 31.

Elixir Catharticum Compositum N. F.: This elixir contains saccharin to such an extent as to render it disagreeable, even nauseous. It should be replaced by glycerin.—Hommell, Philemon E., *Merck's Rep.* 1912, v. 21, p. 31.

Elixir of Cardamom Compound: Compound elixir of cardamom may be used in disguising the taste of the bromides and iodides and the saline salts.—White, William R., *J. Am. Pharm. Assoc.* 1912, v. 1, p. 515.

Floyd, Henry B.: The City of Washington Branch recommends that this preparation be not added to the National Formulary because of its small possibilities as a vehicle.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 277.

Newton, R. Albro: The New England Branch endorses the compound elixir of cardamom and recommends that the spirit be triturated with the kieselguhr and added to the mixed liquids in portions, then filtered.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 278.

Elixir Corydalis Compositum N. F.: Compound elixir of corydalis may be classed as an alterative.—Bruder, Otto E., *N. A. R. D. Notes*, 1912-1913, v. 15, p. 25.

Elixir Digestivum Compositum N. F.: Compound digestive elixir, a defense of the preparation, together with a revised formula to meet the demands of the medical man.—*N. A. R. D. Notes*, 1912, v. 14, p. 941; see also p. 1250.

Sayre, L. E.: Of 11 samples of elixir of lactated pepsin examined. 5 contained saccharin, 4 others were very weak, and all were bad.—Bull. Kansas Bd. Health, 1912, v. 8, p. 105.

Elixir of Formates: Elixir of formates might be simplified by directing that formic acid and the carbonates of the alkalies be used in place of the formates.—Koch, Julius, J. Am. Pharm. Assoc. 1912, v. 1, p. 279.

Tyrer and Gosling: Brief notes on some commercial formates.—Chem. & Drug. 1912, v. 81, p. 204; see also Pharm. J. 1912, v. 89, p. 157, 171.

Compound Elixir of Formates: The new compound elixir of formates is a rather complicated affair. It is useless therapeutically.—Hommell, P. E., Proc. New Jersey Pharm. Assoc. 1912, p. 92.

Elixir Frangula N. F.: Elixir of buckthorn bark contains 34 per cent of alcohol, which is unnecessary. It does not enhance the effect of the drug, while glycerin would.—Hommell, Philemon E., Merck's Rep. 1912, v. 21, p. 31.

Elixir Gentianæ Glycerinatum N. F.: Glycerinated elixir of gentian with suggestions for a modified formula.—Anon., N. A. R. D. Notes, 1912, v. 14, p. 1793; see also p. 1797.

Hommell, Philemon E.: This elixir contains saccharin to such an extent as to render it disagreeable, even nauseous. It should be replaced by glycerin.—Merck's Rep. 1912, v. 21, p. 31.

Elixir of Glycyrrhiza, Aqueous: The aqueous elixir of licorice was not indorsed by members of the New England Branch.—Newton, R. Albro, J. Am. Pharm. Assoc. 1912, v. 1, p. 278.

Floyd, Henry B.: A two months' old sample of elixir glycyrrhizæ, aquosum exhibited at the City of Washington Branch, was in a high state of fermentation and was utterly useless for dispensing.—J. Am. Pharm. Assoc. 1912, v. 1, p. 276.

Elixir Potassii Bromidi N. F.: Elixir of potassium bromide contains 25 per cent of alcohol, for which there is absolutely no need. The aromatic elixir should be cut down one-half and water with a small per cent of glycerin substituted.—Hommell, Philemon E., Merck's Rep. 1912, v. 21, p. 32.

Elixir Rubrum N. F.: Red elixir would best be made from true oil of Ceylon cinnamon.—N. A. R. D. Notes, 1912-1913, v. 15, p. 1282.

Kebler, L. F.: It is not in keeping with the intent of the pure food and drugs act to assign to a preparation a name suggested by its color only.—J. Am. Pharm. Assoc. 1912, v. 1, p. 276.

Floyd, Henry B.: The City of Washington Branch recommends that the name be changed to elixir aromaticum rubrum.—J. Am. Pharm. Assoc. 1912, v. 1, p. 277.

Compound Elixir of Sodium Salicylate: Compound elixir of sodium salicylate, after standing 20 days, had to be filtered; and had again formed a precipitate at the end of a month.—De Jonge, Cornelius, J. Am. Pharm. Assoc. 1912, v. 1, p. 272.

Hommell, P. E.: This elixir could be therapeutically improved by the addition of a small amount of compound fluid extract of gentian.—Proc. New Jersey Pharm. Assoc. 1912, p. 92.

Elixir Terpini Hydras N. F.: Elixir of terpin hydrate containing double the amount of terpin hydrate can be prepared by the addition of a small amount of acetic acid. A formula is suggested.—Utech, P. Henry, J. Am. Pharm. Assoc. 1912, v. 1, p. 474.

Elixir Turneræ N. F.: Elixir of damiana contains glycerin, but in order to render it more palatable and effective the amount should be increased.—Hommell, Philemon E., Merck's Rep. 1912, v. 21, p. 31.

Elixir of Three Bromides: Elixir of three bromides did not meet with a very enthusiastic reception.—White, William R., J. Am. Pharm. Assoc. 1912, v. 1, p. 516.

Floyd, Henry B.: The City of Washington Branch recommends that the elixir trium bromidorum be not included in the National Formulary; or, if retained, that no coloring be used.—J. Am. Pharm. Assoc. 1912, v. 1, p. 276.

Hommell, Philemon E.: The alcohol in this formula is unnecessary and the flavoring agents form a sickening, irritating blend.—Merck's Rep. 1912, v. 21, p. 62; see also Proc. New Jersey Pharm. Assoc. 1912, p. 91.

Compound Elixir of Vanillin: Compound elixir of vanillin would be improved by having the spirit of vanillin reduced one-half.—Newton, R. Albro, J. Am. Pharm. Assoc. 1912, v. 1, p. 277.

Elixir Viburni Opuli Compositum N. F.: Compound elixir of cramp bark should contain about 3 fluid ounces of glycerin to the two pints.—Hommell, Philemon E., Merck's Rep. 1912, v. 21, p. 31.

Elixir Viburni Prunifolii N. F.: Elixir of viburnum prunifolium should contain a proper sweetening agent, as glycerin.—Hommell, Philemon E., Merck's Rep. 1912, v. 21, p. 31.

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Anon.: Chapters in practical pharmacy dealing with the preparations of plaster. Illustrated.—Pharm. J. 1912, v. 88, p. 62, 158, 240.

Blair, Henry C.: Plasters, except the ready-made kind, are now used but seldom. This is unfortunate, as, for many purposes and for many reasons, specially prepared plasters are far superior to the factory-made ones.—J. Am. Pharm. Assoc. 1912, v. 1, p. 18.

Richter, R.: Stieh-Wulff asserts that plasters can not be made germ free without the addition of antiseptics like thymol, menthol, and phenol.—Pharm. Zentralh. 1912, v. 53, p. 414.

EMPLASTRUM BELLADONNÆ.

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Dohme and Engelhardt: A few slight modifications of the assay process for belladonna plaster, which work very well, have recently been recommended.—J. Am. Pharm. Assoc. 1912, v. 1, p. 600.

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Bancroft, Wilder D.: The theory of emulsification. The pharmacist looks upon an emulsion essentially as consisting of minute drops of oil, each one in a tiny capsule, and the whole lot suspended in water. There is no such thing as an ideal proportion of oil, water and gum, though the literature might lead one to think so.—J. Phys. Chem. 1912, v. 16, p. 177-233, 345-372, 475-512, 739-758.

Ellis, Ridsdale: The properties of oil emulsions, Part II. Permanency in size of the particles.—J. prakt. Chem. 1912, v. 80, p. 597-616.

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Rosenthaler and Kueny: The determination of oil in pharmaceutical emulsions according to Gerber's acid method.—Apoth.-Ztg. 1912, v. 27, p. 289-290.

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Lesné and Dreyfus: Adrenalin introduced into the stomach or small intestine is deprived of its toxicity. On the other hand, if introduced into the rectum a certain degree of toxicity is conserved.—*Compt. rend. Soc. Biol.* 1912, v. 73, p. 407.

Cartier, François: Adrenalin must be prudently prescribed. Injected into the veins it is very dangerous, less so in subcutaneous injections; but the best way for the present time is to prescribe it by the mouth.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 238.

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Ax, F.: A sample of *secale cornutum* was found to be worm eaten.—*Apoth.-Ztg.* 1912, v. 27, p. 149.

Cushny, A. R.: A large quantity of the ergot on the market is practically inert and the preparations therefore valueless.—*Brit. M. J.* 1912, v. 2, p. 1558.

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far as possible air.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 653; *Proc. New York Pharm. Assoc.* 1912, p. 128.

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Kroeber, Ludwig: Solution of ferric chloride was found to be low in specific gravity.—*Apoth.-Ztg.* 1912, v. 27, p. 184.

Tyrer and Gosling: The arsenic limit of 48 parts per million, in solution of ferric chloride, as suggested by Dunstan and Robertson, should be continued.—*Chem. & Drug.* 1912, v. 81, p. 205; see also *Pharm. J.* 1912, v. 89, p. 157.

Strode, Sylvanus E.: Investigations prove that some few of the pharmacists of the State are not giving any attention whatever to the suggestion to keep tincture of ferric chloride in small dark amber glass stoppered bottles.—*Ann. Rep. Ohio Dairy & Food Com.* 1911, 1912, p. 20.

Cook, Alfred N.: Tincture of iron was found to vary from 0 per cent to 143 per cent.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 26.

Barnard, H. E.: A sample labeled tincture of iron was found to be tincture of iodine.—*Rep. Indiana Bd. Health*, 1911, 1912, p. 265.

Table showing some of the analytical results reported for tincture of ferric chloride.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Barnard, H. E.	20	13	<i>Rep. Indiana B. Health</i> , 1911, 1912, p. 272.
Brown, Linwood A.	46	16	<i>Proc. Kentucky Pharm. Assoc.</i> , 1912, p. 52.
Caspari, Chas., Jr.	418	97	<i>Rep. Maryland F. & D. Com.</i> , 1912, Baltimore, 1913, p. 15.
Cook, Alfred N.	28	11	<i>Rep. South Dakota F. & D. Com.</i> 1912, p. 60.
Cox, C. B.	54	23	<i>Proc. Washington Pharm. Assoc.</i> 1912, p. 61.
Stallings, R. E.	113	58	<i>Bull. Georgia Dept. Agric.</i> No. 56, 1912, p. 109-114.
Strode, Sylvanus E.	1	1	<i>Ann. Rep. Ohio D. & F. Com.</i> 1911, 1912, p. 65.

Editorial Note: So far as known there is no way in which tincture of chloride of iron can be prescribed, so that it will not be more or less injurious to the teeth, if it remains chloride of iron.—*J. Am. M. Assoc.* 1912, v. 58, p. 805; see also p. 1221.

Sharpe, H. A.: Tincture of ferric chloride may be administered in capsules, filled with a dropper by the patient.—*J. Am. M. Assoc.* 1912, v. 58, p. 1221.

Harris and Creighton: The reduction of ferric chloride by surviving organs.—*Biochem. J. Liverpool*, 1912, v. 6, p. 429-432.

FERRI CITRAS.

Pratt, Walter Ryley: It is suggested that the method of the U. S. P. for the determination of iron in scale preparations should be adopted in the Ph. Brit. and B. P. C.—*Pharm. J.* 1912, v. 88, p. 359; see also p. 641.

Editorial Note: Several bibliographic notes as to the hypodermic use of iron in anæmia are given.—*J. Am. M. Assoc.* 1912, v. 58, p. 722.

FERRI ET AMMONII CITRAS.

Jensen, H. B.: An abnormal sample, with a practically neutral reaction, was found to gelatinize completely in 18 hours when in aqueous solution, 1 in 4, although permanently soluble in half its weight of water.—*Evans' An. Notes*, No. 7, 1912, p. 40.

FERRI ET AMMONII TARTRAS.

Smith, Carl E.: For the determination of iron it is directed to take the "dry" salt. It seems reasonable to interpret this as meaning "having a dry appearance," but it is also possible to interpret this as meaning a salt free from water of hydration.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1267.

FERRI ET QUININÆ CITRAS SOLUBILIS.

Diekman, George C.: In 12 samples of soluble iron and quinine citrate examined, the alkaloid content varied from 8.48 to 12.60.—*Proc. New York Pharm. Assoc.* 1912, p. 129.

Smith, Carl E.: In the quinine determination there is no good reason for directing spontaneous evaporation of the chloroform.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1267.

Mannheim, E.: The production and testing of iron and quinine citrate.—*Apoth.-Ztg.* 1912, v. 27, p. 25-26, 34-35; see also *D.-A. Apoth.-Ztg.* 1912, v. 33, p. 40.

FERRI ET STRYCHNINÆ CITRAS.

Smith, Carl E.: Spontaneous evaporation of chloroform in the assay for strychnine causes unnecessary loss of time.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1268.

Diekman, George C.: In 9 samples of iron and strychnine citrate examined, the alkaloid content varied from 0.85 to 1.10.—*Proc. New York Pharm. Assoc.* 1912, p. 129.

Brown, Linwood A.: Three samples analyzed; two deficient in strychnine.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 49.

FERRI HYDROXIDUM CUM MAGNESII OXIDO.

Raubenheimer, Otto: A modified formula for arsenic antidote: 300 cc. of milk of magnesia are diluted with an equal quantity of water; to this mixture is added gradually a mixture of 40 cc. of solution of ferric sulphate with 260 cc. of water; shake well and administer.—*Proc. New York Pharm. Assoc.* 1912, p. 321-324; see also *J. Am. Pharm. Assoc.* 1912, v. 1, p. 996-998.

FERROUS LACTATE.

Beringer, Geo. M.: A proposed N. F. monograph for iron lactate, which should contain not less than 97 per cent of pure ferrous lactate.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 252.

Gane, E. H.: One sample of iron lactate was only partially soluble and contained much ferric lactate.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 501.

Pearson, W. A.: Two samples contained excessive amounts of sulphates, were not completely soluble in forty parts of water and left excessive residues on ignition.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 173.

Kloeman, L.: Report of experimental observations on the action of ferrous lactate on the normal gastrointestinal tract of dogs.—*Ztschr. physiol. Chem.* 1912, v. 80, p. 29.

FERRI PHOSPHAS SOLUBILIS.

Smith, Carl E.: The identity tests are in need of revision, as they fail to show definitely the composition of the preparation.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1268.

FERRI SULPHAS.

Hofmann, K. B.: The vitriols of the ancients and their knowledge of green and of blue vitriol.—*J. prakt. Chem.* 1912, v. 86, p. 305-318.

Mann, E. W.: The highest proportion of $\text{FeSO}_4 \cdot 7 \text{H}_2\text{O}$ met with in the pea-crystal form has been 96.75 per cent.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 39.

Smith, Carl E.: The U. S. P. does not explicitly state how much ferrous sulphate the exsiccated salt should contain. Prepared by the official directions it contains theoretically not less than 99 per cent of $\text{FeSO}_4 \cdot 1\frac{1}{2} \text{H}_2\text{O}$, but allowance must be made for absorption of moisture during exposure to the air while the dried salt is powdered.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1268.

FERRUM.

Baxter and Hoover: A revision of the atomic weight of iron. The analysis of ferric oxide.—*Eighth Internat. Cong. Appl. Chem.*

1912, v. 2, p. 37-52. For discussion see vol. 28, p. 28; see also *J. Am. Chem. Soc.* 1912, v. 34, p. 1657-1669.

Kratz, G. D.: Wright's method of making colloidal ferric oxide, based on the washing out of the coagulating agent, ammonium chloride, does not give a very concentrated solution but it avoids the necessity of dialysis or of washing a gelatinous precipitate.—*J. Phys. Chem.* 1912, v. 16, p. 126-130.

Osborne, Oliver T.: The strongest iron we can administer seems to be the tincture of the iron chloride.—*J. Am. M. Assoc.* 1912, v. 59, p. 1161.

Heubner, W.: On the influence of iron in chlorosis.—*Therap. Monatsh.* 1912, v. 26, p. 44-45.

Ashby, Hugh T.: The relation of iron to anæmia in infancy and childhood; also showing what a large amount of iron there is stored up in the foetal liver at birth.—*Lancet*, 1912, v. 183, p. 150.

Yeager, William H.: It is a grave mistake to think there is scarcely any limit to the amount of iron a person can take without being harmed thereby.—*Hahnemann. Month.* 1912, v. 47, p. 414.

FERRUM REDUCTUM.

Richter, R.: The Ph. Germ. V requires that reduced iron be 99 per cent soluble in hydrochloric acid.—*Pharm. Zentrallh.* 1912, v. 53, p. 475.

Smith, Carl E.: The "iron by hydrogen" of the market usually meets all the chemical requirements of the U. S. P. and has a tendency to test higher in metallic iron than those products which conform more closely to the physical characteristics given for "reduced iron" in the various pharmacopœias, including the U. S. P.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1268.

Dohme and Engelhardt: The assay process could be improved.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 600.

FLUIDEXTRACTA.

Floyd, Henry B.: The City of Washington Branch recommends that the addition of fluid extracts to the U. S. P. or N. F. be discouraged.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 396.

Richter, R.: The Ph. Germ. V now directs that the moistened drug be allowed to stand for from 12 to 48 hours before packing in the percolator.—*Pharm. Zentrallh.* 1912, v. 53, p. 439-440.

Kalusowski, Henry E.: Many fluid extracts can be prepared far more satisfactorily and efficiently in a small way by the pharmacist than in a large way by the manufacturer, who often turns unidentified drugs over to an incompetent, underpaid, and inexperienced boy.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 87.

van Itallie, E. I.: The Ph. Helv. IV requires that 4 of the 6 official fluid extracts yield a required amount of extract. Considerable difficulty was experienced in securing an extract of constant weight.—Pharm. Weekblad, 1912, v. 49, p. 331.

Azadian, A.: Fluid extracts, a study of the influence of the method of preparing on their quality and their chemical composition.—Schweiz. Wchnschr. Chem. u. Pharm. 1912, v. 50, p. 358-362, 373-377.

De Barr, Edwin: The fluid extracts examined were in nearly every case from 10 to 12 years old or more.—Rep. Oklahoma P. H. Dept. 1912, p. 424.

Seoville, Wilbur L.: Report of the condition of certain tannin containing fluid extracts at the end of three years.—J. Am. Pharm. Assoc. 1912, v. 1, p. 334-337.

Mann, E. W.: A table showing suggested standards, ranges of specific gravity and other requirements for Ph. Brit. fluid extracts.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 46.

Jaiser, Adolph: Presents a table giving the specific gravity and extract content of a number of Ph. Germ. V fluid extracts.—Südd. Apoth.-Ztg. 1912, v. 52, p. 223.

Kunze: Tabulated report on the specific gravity, extract content, ash and alkaloid content of a number of fluid extracts.—Apoth.-Ztg. 1912, v. 27, p. 105; see also Hoyer, p. 315.

Amort and Rothe: The valuation of fluid extracts by determining the specific gravity, the extract content, and the active ingredients.—Pharm. Ztg. 1912, v. 57, p. 175-176.

Caesar & Loretz: An outline of the method employed for determining the extract content of fluid extracts and the extract content of tinctures, respectively.—Jahres-Ber. 1912, p. 124.

La Wall, Charles H.: A new method of assay for alkaloidal fluid extracts, with tabulated comparative results by the U. S. P. method and sodium chloride method.—J. Am. Pharm. Assoc. 1912, v. 1, p. 29.

Schreiber, Richard: The determination of the alkaloid content of a number of Ph. Germ. V fluid extracts according to the directions included in the more important pharmacopœias.—Apoth.-Ztg. 1912, v. 27, p. 600-602, 609-610, 617-619, 626-627.

Varnum, Walter H.: The new and time saving plan of using the fluid extracts as a base for tinctures, spirits, infusions, sirups, etc., is the cause of so many preparations being found by the pure food inspectors to be of the wrong strength.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1242.

Ford, Charles M.: Compare the formula, if one is given, on the label with the U. S. P. or N. F. and you will find your elixirs and fluid extracts nearly all below standard.—Proc. Nebraska Pharm. Assoc. 1912, p. 112.

De Barr, Edwin: Of 19 fluid extracts examined, 17 were not passed.—Rep. Oklahoma P. H. Dept. 1912, p. 424.

Anon.: The proposed omission of something like 30 fluid extracts from the new pharmacopœia is justifiable. This class of remedies is so unreliable, varying so much in strength, and is so influenced by age that they should be omitted.—Ellingwood's Therap. 1912, v. 6, p. 25.

FLUIDEXTRACTA N. F.

Diehl, C. Lewis: A number of formulas for fluid extracts to be added to the National Formulary.—J. Am. Pharm. Assoc. 1912, v. 1, p. 258-259.

Hommell, P. E.: Some of the fluid extracts of the N. F. should be deleted, as boldo, calendula, cornus, ferri pomatum, helianthemum, menyanthis, and convallaria, as they are seldom prescribed.—Proc. New Jersey Pharm. Assoc. 1912, p. 94.

Editorial: The recommendation of the Washington Branch of the A. Ph. A. against the addition of fluid extracts to the U. S. P. or N. F. furnishes a curious commentary on the evolution in pharmacy and the beliefs and fads in medicine as it has been practiced in this country.—Pharm. Era, 1912, v. 45, p. 241.

ABSINTHIUM: A proposed N. F. description. The ash content should not exceed 10 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 67.

Richter, R.: The Ph. Germ. V now outlines the microscopical appearance of *Artemisia absinthium* Linné.—Pharm. Zentralh. 1912, v. 53, p. 593.

Caesar & Loretz: A sample of absinth yielded an ash content of 12.0 per cent.—Jahres-Ber. 1912, p. 103.

J. D. Riedel, A.-G.: The ash content of absinth was found to vary from 6.3 to 9.3 per cent; amount of insoluble ash to 1.7 per cent.—Riedel's Berichte, 1912, p. 49.

ACONITI FOLIA: A proposed N. F. monograph. The drug should, when assayed by the U. S. P. method for aconite, yield not less than 0.2 per cent of alkaloids and on incineration should yield not over 16 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 67.

ADONIS: A proposed N. F. monograph. On incineration the drug should yield not more than 12 per cent of a white ash, which should be almost entirely soluble in hydrochloric acid.—J. Am. Pharm. Assoc. 1912, v. 1, p. 67.

J. D. Riedel, A.-G.: The ash content of adonis was found to vary from 7.8 to 8.2 per cent; amount of insoluble ash to 0.2 per cent.—Riedel's Berichte, 1912, p. 51.

Fyfe, John William: Adonis is a cardiac tonic of marked activity and in many cases its therapeutic influence is superior to that of digitalis.—Eclectic M. J. 1912, v. 72, p. 9-11.

ALTHEA: A proposed N. F. monograph. Upon incineration the ash of the leaves should not exceed 15 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 68.

J. D. Riedel, A.-G.: The ash content of mallow leaves was found to vary from 15.2 to 16.3 per cent.—Riedel's Berichte, 1912, p. 49.

ANGELICE RADIX: A proposed N. F. monograph. On incineration the drug should yield not over 8 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 69.

J. D. Riedel, A.-G.: The ash content of angelica was found to vary from 8.9 to 12.1 per cent; amount of insoluble ash to 3.3 per cent.—Riedel's Berichte, 1912, p. 50.

APIUM: A proposed N. F. monograph. Upon incineration the seed should yield not more than 8 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 162.

Puckner, W. A.: *Apium graveolens* Linné is an unimportant drug that could well be spared.—Rep. Council Pharm. & Chem. 1912, p. 40.

Rippetoe and Minor: Three samples of celery seed yielded from 9.11 to 14.50 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 438.

Pearson, W. A.: The medicinal celery seed usually contains more than six oil ducts in each carpel, while the domestic was never found to have more than six.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 169.

ARECA: A proposed N. F. monograph, including an assay process. The drug is required to contain not less than 0.5 per cent of areca alkaloids, and on incineration should yield not over 2 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 70.

ARNICÆ RADIX: A proposed N. F. monograph. On incineration the drug should yield not over 12 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 70.

J. D. Riedel, A.-G.: The ash content of arnica root was found to vary from 8.4 to 10.3 per cent.—Riedel's Berichte, 1912, p. 52.

ASCLEPIAS: A proposed N. F. monograph. On incineration the drug should yield not more than 9 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 70.

Simmons, Benj. L.: *Sp. asclepias* is a great medicine in the realm of its operation. It is a sedative, diaphoretic, and antirheumatic, having also slight antispasmodic and tonic effects.—Nat. Eclect. M. Assoc. Quart. 1912-1913, v. 4, p. 70.

BOLDO: A proposed N. F. monograph. On incineration the leaves should yield not over 10 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 71.

J. D. Riedel, A.-G.: The ash content of boldo was found to vary from 8.3 to 9.2 per cent.—Riedel's Berichte, 1912, p. 51.

CAMELLIA: An illustrated description of the structure of the stems of tea leaf.—Hoyer, Otto, *Ztschr. allg. österr. Apoth.-Ver.* 1912, v. 50, p. 119-120.

Anon.: A cup of tea, its chemistry, physiology, and æsthetics, with a table showing the caffeine content of various kinds of tea.—*Sc. Am. Suppl.* 1912, v. 73, p. 86-87.

Sawamura, S.: An investigation on the manufacture of tea, including a discussion of the effects of steaming on the activity of the enzymes of tea leaves, the effect of rolling on the solubility of tea, and the effect of firing on the chemical composition of tea.—*Sc. Am. Suppl.* 1912, v. 74, p. 374-375.

Göhring, Alfred: Chinese tea. A criticism of Buchheister's *Handbuch der Drogistenpraxis*.—*Pharm. Ztg.* 1912, v. 57, p. 544.

Anon.: Chinese tea is marketed as Kongo, Pecco, Souchong, Hyson, Imperial Flowers, and Gunpowder.—*Pharm. Ztg.* 1912, v. 57, p. 353-354.

West, Fred: The detection of Prussian blue in tea, by the well known blue color method of the reaction between Prussian blue and a solution of oxalic acid.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 528.

Hansawa and Yuwasaki: "On the question about falsification of the Japanese tea." Green tea was formerly prepared in accordance with the Chinese method but is now free from objectionable color. Methods for detecting added colors are outlined.—*J. Pharm. Soc. Japan*, February, 1912, p. 121.

CANELLA ALBA: A proposed N. F. monograph. Upon incineration the drug should yield not over 8 per cent of ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 161.

CASCARILLA: A proposed N. F. monograph. Upon incineration, the drug should yield not over 10 per cent of ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 162.

Caesar & Loretz: The ash content of cascarilla varied from 11.55 to 16.78 per cent.—*Jahres-Ber.* 1912, p. 27, 102.

J. D. Riedel, A.-G.: The moisture content of cascarilla bark was found to be 8.3 per cent; ash content, 8.7 per cent; amount of insoluble ash, 0.2 per cent.—*Riedel's Berichte*, 1912, p. 48.

CAULOPHYLLUM: A proposed N. F. monograph. Upon incineration, it should yield not over 6 per cent of ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 162.

Puckner, A. W.: *Caulophyllum thalictroides* (Linné) Michaux is an unimportant drug that could well be spared.—*Rep. Council Pharm. & Chem.* 1912, p. 40.

Rippetoe and Minor: One sample of caulophyllum contained 8.55 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 438.

Anon.: Black cohosh has a direct influence upon the muscular structure of the womb, and so exercised, influences the function of that organ.—Ellingwood's Therap. 1912, v. 6, p. 75-76.

COCILLANA has been demonstrated beyond a doubt to be a valuable expectorant.—Needham, R. H., J. Am. Pharm. Assoc. 1912, v. 1, p. 1348.

Hommell, P. E.: Fluid extract of cocillana is opposed on therapeutic grounds.—Proc. New Jersey Pharm. Assoc. 1912, p. 94.

Swain, Robert Lee: Rusbyine is the alkaloid of *Guarea rusbyi*, the South American plant known as cocillana, discovered by H. H. Rusby.—Drug. Circ. 1912, v. 56, p. 63.

COFFEA: The per capita consumption of coffee in the several countries varies from 15.12 pounds in Holland, 9.33 in the United States, and 5.80 in Germany, to 0.65 pound in England. (Abstract).—Südd. Apoth.-Ztg. 1912, v. 52, p. 539.

Schauz, Moritz: The progress of the Brazilian coffee valorization.—Tropenpflanzer, 1912, v. 16, p. 131-133.

Grafe, Viktor: Observations on the origin of coffee oil.—Monatsh. Chem. 1912, v. 33, p. 1389-1406.

Gould, R. A.: The gases evolved from roasted coffee, their composition and origin.—Eighth Internat. Cong. Appl. Chem. 1912, v. 26, p. 389.

Farcy, L.: The nature of coffee substitutes, with illustrations of microscopical structures of chicory, barley, and coffees.—Ann. falsif. 1912, v. 5, p. 361-362.

Coro continues unobtainable, according to the importers. None has been received in the port of New York for several years.—Rusby, H. H., J. Am. Pharm. Assoc. 1912, v. 1, p. 499.

Caesar & Loretz: A method for the qualitative determination of cotoin.—Jahres-Ber. 1912, p. 117.

ECHINACEA: Description and tests proposed by the committee on unofficial standards.—J. Am. Pharm. Assoc. 1912, v. 1, p. 165.

Gilmore, Melvin R.: The Indians of the plains have known of the uses of *Echinacea angustifolia* for ages. The plant is very common on the hills of Nebraska. It seems that H. F. C. Meyer, of Pawnee City, Nebraska, who had learned the uses of this plant from the Indians, introduced it into professional practice about 1870.—Meyer Bros. Drug. 1912, v. 33, p. 138.

Sayre, L. E.: Brief note on the cultivation of echinacea, which is produced to the extent of some 200,000 pounds a year in Kansas.—J. Am. Pharm. Assoc. 1912, v. 1, p. 238; see also Henkel, Alice, Drug. Circ. 1912, v. 56, p. 133.

Kraemer and Sollenberger: The pharmacognosy of echinacea. (Abstract).—Am. J. Pharm. 1912, v. 84, p. 37.

Beringer, George M.: The best results in exhausting this drug, for the preparation of fluid extract, were obtained with a menstruum of alcohol 4 volumes and water 1 volume.—*Am. J. Pharm.* 1912, v. 84, p. 38.

Seranton, W. B.: Echinacea as an aid in surgical work.—*Am. J. Clin. Med.* 1912, v. 19, p. 856.

Hommell, P. E.: Fluid extract of echinacea is valuable in the treatment of phagedenic ulceration, septicæmia, and boils.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 94.

Fish, Pierre A.: It is a nontoxic drug, especially indicated where the quality of the blood is not up to the proper standard, and in some ways may be classed with the alteratives as to its action.—*Am. Vet. Rev.* 1911-12, v. 40, p. 30.

Thomas: In recent years echinacea has been extensively used as a treatment for syphilis with most gratifying results.—*Eclectic M. J.* 1912, v. 72, p. 531.

Ellingwood, Finley: Echinacea has been extensively used in the past 10 years, and, while it has not aborted the fever, it is the best of our agents in antagonizing the influence of the toxins within the system. Hæmorrhage is almost an unknown complication to those who have used echinacea in typhoid fever.—*Am. J. Clin. Med.* 1912, v. 19, p. 486.

Fucus vesiculosus Linné is included in a list of unimportant drugs that could well be spared.—Puckner, W. A., *Rep. Council Pharm. & Chem.* 1912, p. 39.

Hydrangea arborescens Linné is an unimportant drug that could well be spared.—Puckner, W. A., *Rep. Council Pharm. & Chem.* 1912, p. 45.

Ruble, W. R.: Hydrangea is a reliable remedy in kidney affections.—*Eclectic M. J.* 1912, v. 72, p. 390.

KAVA KAVA: A proposed N. F. monograph for methysticum, which, upon incineration, should yield about 7 per cent of ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 253.

Adlung: Kava kava, from the root of *Piper methysticum*, is used in the South Sea Islands in the production of an intoxicating beverage. It is also being used to some extent in medicine because of the contained resin. At present the drug is obtained chiefly from the Hawaiian Islands and from the Samoas.—*Apoth.-Ztg.* 1912, v. 27, p. 146.

Aufrecht: The quantitative estimation of kava resin in mixtures containing oil of santal.—*Pharm. Ztg.* 1912, v. 57, p. 92-93.

Tunmann, O.: Discussion of the microchemistry of kawa-kawa and the detection of methysticin by microchemistry.—*Gehe & Co. Handelsbericht*, 1912, p. 179-181.

PARA COTO: A proposed N. F. monograph; on incineration, the drug should yield about 2 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 254.

Rusby, H. H.: Para-coto has been almost unobtainable and almost everything that has been offered under this name has been spurious, eight different barks having appeared under this name during the year.—J. Am. Pharm. Assoc. 1912, v. 1, p. 499.

Caesar & Loretz: Coto bark and para-coto bark have been unavailable for some time and a variety of substitutes have been offered. One sample recently examined proved to be sassafras bark.—Jahres-Ber. 1912, p. 33.

PULSATILLA is an unimportant drug that could well be spared.—Puckner, W. A., Rep. Council Pharm. & Chem. 1912, p. 44.

Cartier, François: Anemonin is the active principle of anemone pulsatilla and anemone pratensis. Its action upon the circulation is similar to that of aconite.—J. Am. Inst. Homœop. 1912, v. 4, p. 246.

Hommell, P. E.: Pulsatilla should have been included long before this in the N. F. or U. S. P., as its action is similar to the favorite aconite root and therefore has a wide range of use in the field of therapeutics.—Proc. New Jersey Pharm. Assoc. 1912, p. 91.

Anon.: Acute and subacute forms of frontal sinusitis have yielded quickly to the action of pulsatilla.—J. Am. Inst. Homœop. 1911–1912, v. 4, p. 1049.

RHAMNUS CATHARTICUS: A proposed N. F. monograph. Buckthorn berries, on incineration, should yield not over 5 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 255.

RHUS TOX: Poison sumac, *Rhus toxicodendron* L., and its toxic action, with a number of illustrations.—Rost and Gilg., Ber. pharm. Gesellsch. 1912, v. 22, p. 296–358.

Hollowey, J. C.: If young boys can not retain their urine, consult the proving of rhus tox.—J. Am. Inst. Homœop. 1911–1912, v. 4, p. 218.

Sambucus canadensis Linné is an unimportant drug that could well be spared.—Puckner, W. A., Rep. Council Pharm. & Chem. 1912, p. 41.

J. D. Riedel, A.-G.: The ash content of sambucus was found to vary from 8.9 to 11.5 per cent; amount of insoluble ash to 1.0 per cent.—Riedel's Berichte, 1912, p. 51.

Rippetoe and Minor: One sample of elder flowers contained 7.65 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 439.

Anon.: Those who have been touched with the germ of skepticism as regards the curative action of drugs will suffer a revival of therapeutic faith if they will prescribe sambucus in cases of chronic coughs

upon its proper indications.—J. Am. Inst. Homœop. 1911–1912, v. 4, p. 921.

STERCULIA: A proposed N. F. monograph. On incineration kola should yield not over 3 per cent of ash, and when assayed by the U. S. P. process for guarana, it should yield not less than 1 per cent of caffeine.—J. Am. Pharm. Assoc. 1912, v. 1, p. 253.

Adlung: Cola is one of the more important articles of the trade of West Africa. The drug is largely used by the natives and is chiefly derived from *Cola vera* and *Cola acuminata*, the former yielding the more valuable seed.—Apoth.-Ztg. 1912, v. 27, p. 137.

Patch, Edgar L.: Kola nut yielded 3.5 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

J. D. Riedel, A.-G.: The ash content of cola seed was found to vary from 2.6 to 3.0 per cent; amount of insoluble ash to 0.1 per cent.—Riedel's Berichte, 1912, p. 52.

Dohme and Engelhardt: Kola nut varies considerably in percentage of caffeine. Taking 1.5 per cent of caffeine as a fair standard, it was necessary to reject 30 per cent of the samples submitted in 1907 and 1910, and 40 per cent in 1911.—J. Am. Pharm. Assoc. 1912, v. 1, p. 102.

Vanderkleed, Chas. E.: The assays of 2 samples of kola nut yielded 0.926 and 1.656 per cent of alkaloids respectively.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 180.

Goris, A.: A second phenol-like body in cola.—Pharm. Zentralh. 1912, v. 53, p. 117–118.

Dohme and Engelhardt: Kola and its preparations should be assayed by a process similar to that given for guarana. To estimate the amount of theobromine, acid instead of water has to be used for extracting the alkaloids from the chloroformic solution.—J. Am. Pharm. Assoc. 1912, v. 1, p. 601.

Caesar & Loretz: An outline of the Keller-Siedler-Fromme method of assay for sterculia.—Jahres-Ber. 1912, p. 144–145.

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Puckner, W. A.: *Thuja occidentalis* Linné is an unimportant drug that could well be spared.—Rep. Council Pharm. & Chem. 1912, p. 38.

Thomas: *Thuja occidentalis* is one of our best agents for local applications in ulcerations of the mouth and throat and warty deposits.—Eclectic M. J. 1912, v. 72, p. 531.

Wilkinson, John G.: The use of thuja for eczematous eruptions.—Ellingwood's Therap. 1912, v. 6, p. 424.

VERBASCUM: A proposed N. F. monograph. Mullein, on incineration, should yield not over 14 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 254.

J. D. Riedel, A.-G.: The ash content of verbasum was found to vary from 10.0 to 11.3 per cent.—Riedel's Berichte, 1912, p. 52.

FLUID GLYCERATES.

Diehl, C. Lewis: A general process for making fluid glycerates, and formulas for several of the preparations to be added to the National Formulary.—J. Am. Pharm. Assoc. 1912, v. 1, p. 259-260.

Hommell, P. E.: A desirable and valuable addition to the list of remedials offered, and physicians will do well to exhibit them, especially the fluid glycerate of krameria, an ideal astringent.—Proc. New Jersey Pharm. Assoc. 1912, p. 95.

Floyd, Henry B.: The City of Washington Branch deprecates the addition of any preparation or preparations to the National Formulary for which there is no actual demand and but little use; as the fluid glycerates fall under this class of preparations, it is recommended that they be not included in the N. F.—J. Am. Pharm. Assoc. 1912, v. 1, p. 396.

FENICULUM.

Rusby, H. H.: Fennel is extremely liable to contamination with large amounts of stems, gravel, sand, dust, weed seeds, and other impurities.—J. Am. Pharm. Assoc. 1912, v. 1, p. 504.

Rippetoe and Minor: Two samples of fennel seed contained 7.93 and 8.45 per cent of ash respectively.—Am. J. Pharm. 1912, v. 84, p. 439.

Patch, Edgar L.: Fennel seed yielded 8.4 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

J. D. Riedel, A.-G.: The ash content of fennel was found to vary from 7.1 to 9.7 per cent; amount of insoluble ash to 1.4 per cent.—Riedel's Berichte, 1912, p. 49.

FRANGULA.

Rusby, H. H.: A spurious bark, apparently a species of *Rhamnus*, has been found mixed in considerable quantity with frangula and should be carefully watched for by dealers.—J. Am. Pharm. Assoc. 1912, v. 1, p. 500.

Caesar & Loretz: The use of frangula is constantly increasing, as the drug is cheaper and more efficient than the disagreeable tasting cascara sagrada.—Jahres-Ber. 1912, p. 33.

Schneider and Richter: The Ph. Germ. V quotes Linné as the author of the name. A test for oxymethylanthraquinone has been added.—Pharm. Zentralh. 1912, v. 53, p. 318.

J. D. Riedel, A.-G.: The ash content of frangula was found to vary from 3.7 to 5.2 per cent.—Riedel's Berichte, 1912, p. 49.

Bernegau and E'Ve: The U. S. P. process for the preparation of fluid extract of frangula seems to give a product which contains only about 70 per cent of the emodin found by assay of the drug.—*J. Am. Pharm. Assoc.* 1912, v. 1 p. 124.

Kroeber, Ludwig: On the valuation of fluid extract of frangula. Comparative observations on the activity of this drug and of rhamnus purshiana indicate that the inclusion of the latter in the Ph. Germ. is not an indication of progress.—*Pharm. Praxis*, 1912, v. 11, p. 213-215.

Richter, R.: Rentsch differentiates extracts of frangula from extracts of cascara sagrada by pyroanalysis.—*Pharm. Zentrallh.* 1912, v. 53, p. 444.

GALLA.

Richter, R.: The Ph. Germ. V gives minute descriptions of the origin, structural characteristics, and microscopical appearance of galls.—*Pharm. Zentrallh.* 1912, v. 53, p. 533.

Rippetoe and Minor: One sample of powdered nut gall contained 1.41 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 442.

GAMBIR.

Swain, Robert Lee: Gambir is the native name applied to the extract prepared from the leaves and twigs of *Orouparia gambir*.—*Drug. Circ.* 1912, v. 56, p. 63.

Tunmann, O.: The production of gambir is in the hands of the Chinese and of Malays and is conducted chiefly in the Peninsula of Malacca and on the Riouw Islands.—*Apoth.-Ztg.* 1912, v. 27, p. 61; see also *Pharm. Weekblad*, 1912, v. 49, p. 984-986.

Figart, D. Milton: The exports of gambir from the Straits Settlements to the United States during the first quarters of 1911 and 1912 amounted to 261 long tons of cube, 832 tons other, and 433 cube and 1,617 tons other, respectively.—*Cons. & Tr. Rep.* June 26, 1912, p. 1339.

North, Horace: It is recommended that the limit of ash be raised from 5 to 6 per cent.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 38.

Young, J. B.: In 8 samples of gambir the ash varied between 4.03 and 32 per cent. The amount soluble in alcohol between 76.9 and 80.8 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 500.

Rippetoe and Minor: Four samples of gambir contained 3.03 to 9.23 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 439.

Becker, M.: Five samples of gambir varied from 77.6 to 82.8 per cent soluble in alcohol, and from 3.7 to 5.2 per cent of ash.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 172.

Adlung: The tree yielding catechu is indigenous to India and Ceylon, but also occurs in east Africa, though up to the present time the production of the drug has not been undertaken.—Apoth.-Ztg. 1912, v. 27, p. 147.

Tunmann, O.: A number of varieties of catechu are available. The drug comes chiefly from Rangoon by way of Bombay.—Apoth.-Ztg. 1912, v. 27, p. 70-71.

Schneider and Richter: The alcohol soluble requirements for catechu are from 15 to 30 per cent.—Pharm. Zentrallh. 1912, v. 53, p. 227.

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Tutin, Frank: The proposed method of microsublimation for the detection of aesculin and the identification of gelsemium.—Pharm. J. 1912, v. 88, p. 157; see also Tunmann, O., Apoth.-Ztg. 1912, p. 27, p. 313-314.

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Dohme and Engelhardt: Assay processes of gelsemium are only of relative value as long as the proportion of the active substance to the inactive is not known in the residue determined as total alkaloids.—J. Am. Pharm. Assoc. 1912, v. 1, p. 600.

Sayre, L. E.: The LaWall alkaloidal assay process cannot be readily applied to the assay of fluid extract of gelsemium. A slight modification, using acidulated water (2 per cent sulphuric acid), appears to give satisfactory results.—Am. J. Pharm. 1912, v. 84, p. 193-196.

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For additional references see Chem. Abstr.; Exper. Sta. Rec. and Chem. Zentralbl.

GRANATUM.

Schneider and Richter: The Ph. Germ. V again includes the bark of the branches as well as of the roots of *Punica granatum* Linné.—Pharm. Zentralh. 1912, v. 53, p. 318.

Caesar & Loretz: The root bark of pomegranate was found to contain 0.114 to 0.32 per cent of alkaloid. The stem bark yielded from 0.09 to 0.295 per cent of alkaloids.—Jahres-Ber. 1912, p. 33–34; see also p. 118–120.

Schreiber, Richard: A report on fluid extract of pomegranate made according to the directions given in several pharmacopœias. The bark assayed 0.4416 per cent of total alkaloid. The fluid extract made according to the U. S. P. method assayed 0.23 per cent, and when made according to modifications suggested by the author, 0.38 per cent of alkaloid.—Apoth.-Ztg. 1912, v. 27, p. 618.

GRINDELIA.

Swain, Robert Lee: Grindelia was named after the German scientist, Grindel.—Drug. Circ. 1912, v. 56, p. 63.

J. D. Riedel, A.-G.: The ash content of *grindelia robusta* was found to vary from 5.6 to 8.3 per cent.—Riedel's Berchite, 1912, p. 51.

Jackson, John R.: Fluid extract of *Grindelia robusta* is recommended for cases of poisoning both from *Rhus toxicodendron* and *R. venenata*, the latter being the worse of the two species.—Chem. & Drug. 1912, v. 80, p. 31.

Cartier, François: The physiological influence of *grindelia robusta* is exhibited on the heart, at first by a quickening of the pulse, subsequently by slowing it.—J. Am. Inst. Homœop. 1911–1912, v. 4, p. 380.

GUAIACOL.

Smith, Carl E.: Guaiacol readily acquires a color on exposure to light and air and can not be expected to be "colorless" after having been kept for some time. The official melting and boiling points are those given for chemically pure guaiacol and are not applicable to the medicinal article.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1270.

North, Horace: Seven lots gave a specific gravity at 25° varying between 1.1080 and 1.1151.—Rep. Lehm & Fink's Analyt. Dept. 1910–1912, 1913, p. 40.

Jensen, H. R.: A sample of the natural product had specific gravity, 1.1185; optical rotation, -0.4° ; refractive index (20°), 1.5422.—Evans' An. Notes, No. 7, 1912, p. 36.

Klemenc, Alfons: On the nitrating of guaiacol.—Monatsh. Chem. 1912, v. 33, p. 701-707.

Kahn, Joseph: Guaiacol is less toxic and more antiseptic than phenol.—Proc. New York Pharm. Assoc. 1912, p. 168.

GUAIACOLIS CARBONAS.

Richter, R.: The Ph. Germ. V includes duotal as a synonym for guaiacol carbonate.—Pharm. Zentralh. 1912, v. 53, p. 565.

Smith, Carl E.: It is recommended that the present limits for melting point, 84° to 87° , be retained. Tests from other pharmacopœias are given.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1270.

Kahn, Joseph: Guaiacol carbonate is decomposed into guaiacol in the intestine, the amount of guaiacol liberated being only 50 per cent.—Proc. New York Pharm. Assoc. 1912, p. 169.

Harris, Norman M.: Intestinal antiseptics; a report of experimental observations on intestinal antiseptics, including guaiacol carbonate.—Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1912, p. 280-302; also Repr. Therap. Res. Com. 1912, p. 151-171.

GUAIACUM.

Rippetoe and Minor: The determination of the acid number for guaiac is very unsatisfactory, owing to the color of the solution.—Am. J. Pharm. 1912, v. 84, p. 445.

Needham, R. H.: Guaiacum is a resinous product that every one knows deteriorates with age and exposure, losing its efficiency as a tonic and alterative.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1345.

Rippetoe and Minor: Twelve samples of guaiac contained from 0.75 to 4.77 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 440.

North, Horace: Three samples gave from 3.13 to 3.63 per cent of ash.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 40.

Jensen, H. R.: Four samples of guaiacum resin showed the following variations: ash, 1.7 to 11.7; insoluble in 90 per cent alcohol, 9.5 to 29.5 per cent.—Evans' An. Notes, No. 7, 1912, p. 37.

Mann, E. W.: Five samples of block resin of guaiac ranged from 72.88 to 97.2 per cent soluble in alcohol (90 per cent).—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 12.

Dohme and Engelhardt: Many samples of resin of guaiac had to be rejected on account of their insufficient solubility in alcohol. Varying from 33 per cent of the samples in 1911 to 50 and even 60 per cent in former years.—J. Am. Pharm. Assoc. 1912, v. 1, p. 101.

Hommell, P. E.: While Cohen's guaiac gargle is of value in tonsillitis, yet it is not astringent enough for the variety of sore throats the average physician meets with.—Proc. New Jersey Pharm. Assoc. 1912, p. 93.

GUARANA.

Stockman: Description and illustration of some interesting molded forms of guarana from South America.—Pharm. J. 1912, v. 89, p. 685.

Table showing reported variation in alkaloidal content of guarana.

Reporters.	Number of samples.	Alkaloidal principles.		References.
		Minimum.	Maximum.	
		<i>Per cent.</i>	<i>Per cent.</i>	
North, Horace.....	17	4.07	5.16	Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 41.
Seoville, Wilbur L.....	17	4.0	4.5	J. Am. Pharm. Assoc. 1912, v. 1, p. 1341.
Vanderkleed, Chas. E.....	7	3.720	4.690	Proc. Pennsylvania Pharm. Assoc. 1912, p. 180.

HÆMATOXYLON.

Palmer, T. Chalkley: Logwood came into use as a dye as a result of Spanish explorations, and was long known as Spanish logs.—Am. J. Pharm. 1912, v. 84, p. 97.

McEwan, Donald: Hæmatoxyton, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

HAMAMELIDIS CORTEX.

Holm, Theo.: A botanical paper on *Hamamelis virginiana* L. includes 22 figures drawn from nature.—Merck's Rep. 1912, v. 21, p. 5-9.

J. D. Riedel, A.-G.: The ash content of witchhazel bark was found to vary from 4.3 to 5.1 per cent; amount of insoluble ash to 0.5 per cent.—Riedel's Berichte, 1912, p. 51.

AQUA HAMAMELIDIS.

North, Horace: Witchhazel is labeled 15 per cent alcohol, but may actually contain much less, thus further reducing the already doubtful value of the preparation.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 98.

Emery, J. Q.: The hamamelis water examined contained wood alcohol and formaldehyde, and was deficient in per cent of alcohol.—Rep. Wisconsin D. & F. Com. 1912, p. 25.

Table showing some of the analytical results reported for hamamelis water.

Reporters.	Number of samples.		References.
	Exam-ined.	Re-jected.	
Brown, Linwood A.....	58	8	Proc. Kentucky Pharm. Assoc. 1912, p. 49.
Fitz-Randolph, R. B.....	1	1	Rep. New Jersey Bd. Health, 1911, 1912, p. 226.
Jaffa, M. E.....	14	11	Proc. California Pharm. Assoc. 1912, p. 86.
Klueter, Harry.....	17	3	Rep. Wisconsin D. & F. Com. 1912, p. 60.
Strode, Sylvanus E.....	1	1	Rep. Ohio D. & F. Com. 1912, 1913, p. 78.

HAMAMELIDIS FOLIA.

Scoville, Wilbur L.: Samples of fluid extract of witchhazel at the end of 3 years were found to have precipitated badly, and in some cases the precipitate had caked together.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 337.

HEXAMETHYLENAMINA.

Richter, R.: A review of the Ph. Germ. V gives urotropin, formin, aminoform, hexamethylenamine, formamin, cystamin, and cystogen as synonyms for hexamethylenetetramine.—*Pharm. Zentrallh.* 1912, v. 53, p. 630.

An unsigned article: Suggests hexamet., U. S. P., as an abbreviation for the official title, hexamethylenamina.—*N. A. R. D. Notes*, 1911–1912, v. 13, p. 819.

The Belgian Pharmacopœial Commission recommends that hexamethylenumtetraminum, synonym, urotropin, be included in the supplement to the Ph. Belg. Characters and tests are outlined.—*J. pharm. Anvers* 1912, v. 68, p. 654.

Smith, Carl E.: The U. S. P. gives no tests for impurities. Several from the more recently published works are given.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1271.

Ritchie, D. F.: Brief note on the incompatibility of sodium acid phosphate and urotropin.—*Pharm. J.* 1912, v. 89, p. 478; see also p. 511.

Cohn, Georg: Review of some of the reactions of hexamethylenetetramine and the related compounds.—*Pharm. Zentrallh.* 1912, v. 53, p. 28–29.

Leulier, A.: Hydrated chloral combines with urotropin to form monochloral urotropin and dichloral urotropin.—*J. pharm. et chim.* 1912, v. 6, p. 18–20.

Kroeber, Ludwig: A sample of hexamethylenetetramine gave with Nessler's reagent a distinct yellow color, followed by a grayish green precipitate.—*Apoth.-Ztg.* 1912, v. 27, p. 183.

Eisenberg, Arthur A.: The use of hexamethylenamine in the affections of the upper respiratory tract.—*J. Am. M. Assoc.* 1912, v. 58, p. 2032–2033.

L'Esperance, O. R. T.: Formaldehyde appears in the urine in only 52 per cent of patients taking urotropin. Reaction of the urine is of no importance. These observations confirm those of Burnam.—*Boston M. & S. J.* 1912, v. 167, p. 577; see also p. 673.

McGuigan, Hugh: Hexamethylenamine injected into a dog can be found in the blood several hours after the injection.—*J. Biol. Chem.* 1912, v. 11, p. xxxiii.

Fullerton, William D.: A case of medicinal cystitis following the administration of hexamethylenamine.—*J. Am. M. Assoc.* 1912, v. 58, p. 78–80.

Vanderhoof, Douglas: Hexamethylenamine is recommended as a remedy of value in cases of acute colds, and in patients suffering from acute and chronic bronchitis.—*J. Am. M. Assoc.* 1912, v. 58, p. 331–332.

Editorial: Brief summary of the experimental evidence as to the usefulness of hexamethylenamine.—*J. Am. M. Assoc.* 1912, v. 59, p. 1989.

For additional references see *Index Med.*, *Zentralbl. Exper. Med.* and *J. Am. M. Assoc.*

HOMATROPINÆ HYDROBROMIDUM.

Richter, R.: The Ph. Germ. V now states that homatropine hydrobromide is less soluble in alcohol than in water. The melting point is given as 214°.—*Pharm. Zentralh.* 1912, v. 53, p. 594.

Smith, Carl E.: The rigid figures of the official melting point for homatropine hydrobromide, 213.8°, should be replaced by flexible limits.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1271.

HUMULUS.

Gehe & Co.: The world supply of hops for 1911 was distinctly smaller than that for 1910, the German crop being approximately one-half that of former years.—*Handelsbericht*, 1912, p. 64–65.

Bradley and Tartar: The ripening of hops. Observations on the changes that take place in the chemical composition of the hop cone, and a table showing the composition of hop cones at different stages of the ripening period.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 591.

Smith, James A.: Report on the successful experiments in the culture of hops in Italy under the direction of Claudio Faino.—*Cons. & Tr. Rep.* June 5, 1912, p. 954.

Rusby, H. H.: A definition that permits the supply of hops from which the lupulin has been partly removed is disapproved.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 952.

Tartar and Bradley: A comparative study of methods for the determination of hard and total soft resins in the hop.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 209–212.

Adler, L.: Quantitative determination of the bitter substances of hops. A modification of Lintner's method. (*Z. ges. Brauw.* 1912, v. 35, p. 406–410).—*J. Soc. Chem. Ind.* 1912, v. 31, p. 1003.

Needham, R. H.: Humulus is valuable only as a source of lupulin.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1345.

HYDRARGYRI CHLORIDUM CORROSIVUM.

Smith, Carl E.: The official test for "many foreign salts" is undesirable as well as superfluous.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1271.

Derlin, L.: The Ph. Germ. V assay for mercuric chloride is not satisfactory.—*Apoth.-Ztg.* 1912, v. 27, p. 806.

J. D. Riedel, A.-G.: The commercial article is never absolutely free from non-volatile residue, traces of iron oxide being usually found. A residue not exceeding 0.1 per cent should be permissible.—*Riedel's Berichte*, 1912, p. 39; *Südd. Apoth.-Ztg.* 1912, v. 52, p. 183.

Alcock, F. H.: Attention is called to a sample of mercuric chloride containing calomel, and to the absence from the present Ph. Brit. of a provision against this contingency.—*Chem. & Drug.* 1912, v. 81, p. 821.

Pearson, W. A.: One sample was found which was dark in appearance.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 173.

Serger, H.: A method for the valuation of surgical dressings containing mercuric chloride.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 126; see also Duliére, W., *Ann. Pharm. Louvain*, 1912, v. 18, p. 431–434.

Delépine, Marcel: The changes in dilute solutions of mercury bichloride, due to bicarbonates dissolved in the water and avoidable by acidulation.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 610–622.

Herzstein and Baer: Case of acute mercurial poisoning, followed by general necrosis of maxillary bones and purulent otitis media.—*J. Am. M. Assoc.* 1912, v. 58, p. 854.

Baux and Roques: Fatal mercurial poisoning from intra-uterine injection of mercuric chloride (*Rev. Mens. Gyn. Obst. et Péd.* v. 7, No. 1).—*J. Am. M. Assoc.* 1912, v. 58, p. 740.

Walker, J. T. Ainslie: Like chloride of lime it has one fatal disability as a disinfectant and that is its well known incompatibility with soap, serum, etc. Another objection is its extreme toxicity.—*Am. Med.* 1912, v. 18, p. 255.

Adler, O.: Report of successful results from the use of animal charcoal in suicidal poisoning by mercuric chloride (Wien. klin. Wchnschr. v. 25, No. 21).—J. Am. M. Assoc. 1912, v. 58, p. 2053.

The Registrar-General reports for England and Wales in 1910, 6 accidental deaths and 6 suicides from mercuric chloride.—Pharm. J. 1912, v. 89, p. 96.

For additional references see Index Med.; Zentralbl. Exper. Med. and J. Am. M. Assoc.

HYDRARGYRI CHLORIDUM MITE.

Smith, Carl E.: Although required to be only 99.5 per cent pure, mercurous chloride almost always contains less than 0.1 per cent of impurities.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1271.

North, Horace: The official standard of purity, no method of assay being given in the U. S. P., is maintained on the basis of Hempel's method. As a matter of fact, the percentage of purity never falls below 99.8.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 19.

Pearson, W. A.: This salt becomes dark in color on standing, even when protected from light. It may take a year or more for the color to change perceptibly.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 169.

Abbott, J. S.: Why should calomel for a cow be adulterated any more than calomel for a man? The name "stock calomel" is a fraud.—Rep. Texas F. & D. Com. 1912, p. 21.

"T. F. P.": Protest against the use of calomel in divided doses.—Am. J. Clin. Med. 1912, v. 19, p. 536.

Fellowes, W. E.: Large doses of calomel are recommended in the treatment of diarrhoea.—Brit. M. J. 1912, v. 2, p. 1057.

Hand, A.: Warning as to the use of calomel in intestinal disturbances of children. (Arch. Ped. v. 19, No. 2).—J. Am. M. Assoc. 1912, v. 58, p. 894.

"O. E. W. S.": Report of 2 cases of sudden death, resembling corrosive chloride poisoning, following the taking of calomel as a home remedy.—Am. J. Clin. Med. 1912, v. 19, p. 646.

Claret: Report of a case of poisoning, occurring after a purge with calomel, while the patient was taking with his meals a few drops of hydrochloric acid which had been prescribed for him.—Répert. Pharm. 1912, v. 24, p. 285.

HYDRARGYRI IODIDUM FLAVUM.

Smith, Carl E.: The required official tests fail to provide for calomel as an impurity and adulterant.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1272.

Fairfield, H.: Mercury iodide in human and in veterinary practice.—Phys. Drug. News, 1912, v. 7, p. 152.

Holloway, J. C.: In cases of hard chancre, choose the protoiodide or biniodide of mercury; for a superficial ulcer, merc. sol., and for the rapidly eating, destructive, deep ulcer, sulphur followed by merc. corr.—J. Am. Inst. Homœop. 1911-1912, v. 4, p. 218.

HYDRARGYRI IODIDUM RUBRUM.

Smith, Carl E.: The required minimum of 98.5 per cent of HgI_2 is unnecessarily low.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1272.

J. D. Riedel, A.-G.: This preparation usually contains traces of iron oxide, a slight residue should be permitted.—Riedel's Berichte, 1912, p. 39; see also Südd. Apoth.-Ztg. 1912, v. 52, p. 183.

HYDRARGYRI OXIDUM FLAVUM.

Smith, Carl E.: In making the test with oxalic acid it is important that the oxide be quite free from small lumps, as these are not readily converted into the white oxalate.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1272.

Bernegau and E'We.: It is unfair to this product to run the U. S. P. tests for "absence of foreign salts" and "limit of foreign metals" without running a blank test at the same time, as in many cases the blank gives as high as 0.0005 gm. residue.—J. Am. Pharm. Assoc. 1912, v. 1, p. 124.

HYDRARGYRI OXIDUM RUBRUM.

Smith, Carl E.: This product should be required to contain not more than 0.1 per cent of nonvolatile matter. The official test for "absence" of nitrate is not delicate enough to detect traces, nor is it practicable to make this product free from nitrate, but it should stand the test as now given.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1272.

HYDRARGYRUM (MERCURIC SALICYLATE).

Richter, R.: The Ph. Germ. V now considers mercuric salicylate as mercuric salicylic acid.—Pharm. Zentrallh. 1912, v. 53, p. 633.

Rupp and Kropat: A simple method for the determination of total mercury in mercuric salicylate, by titrating with ammonium sulphocyanide.—Apoth.-Ztg. 1912, v. 27, p. 377-378; see also Brieger, Richard, Arch. Pharm. 1912, v. 250, p. 62-71.

Wollheim, J. L.: Quinine and urea certainly alleviate in many cases, or entirely obviate in some, the pain and discomfort of most of the intramuscular injections of suspension of mercury salicylate.—New York M. J. v. 96, p. 175-177; see also editorial, p. 187.

HYDRARGYRUM.

McCaskey, H. D.: Preliminary figures show that the domestic production of quicksilver in 1911 was 21,821 flasks, of 75 pounds each; a gain of 1,220 flasks over the 1910 record. There were 22 mines producing in 1911, of which 19 are in California.—*Oil, Paint and Drug Rep.* 1912, v. 81, Feb. 5, p. 17.

Richter, R.: The Ph. Germ. V gives the solidification point of mercury as 39° , boiling point as 357° , and its specific gravity as 13.56.—*Pharm. Zentralh.* 1912, v. 53, p. 631.

Koenigsberger, J.: On the critical temperature of mercury.—*Chem. Ztg.* 1912, v. 36, p. 1321.

Forbes, W. R.: An improved method for the purification of mercury.—*Chem. News*, 1912, v. 106, p. 74.

Smith, Carl E.: More stress should be laid on complete solubility in nitric acid, as a test for tin and antimony.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1273.

Dunoyer, L.: Illustrated description of an apparatus for the rapid distillation of mercury in a vacuum.—*Compt. rend. Acad. sc.* 1912, v. 154, p. 1344.

Easley and Brann: Further study of the atomic weight of mercury through the analysis of mercuric bromide.—*J. Am. Chem. Soc.* 1912, v. 34, p. 137-147.

Fleissig: On the estimation of mercury in ointments and in plasters of mercury.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 584-585.

Starr, M. Allen: Industrial diseases, due to the use of metallic poisons, and their prevention.—*Med. Rec.* 1912, v. 81, p. 205, 207.

Hall, Arthur J.: Two fatal cases of mercurial poisoning.—*Lancet*, 1912, v. 182, p. 1467.

Lloyd and Gardner: A case of mercurial poisoning in hat factory operatives, and the estimation of mercury in textile fabrics.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 1109-1111.

Barthe, L.: Research on the toxicology of mercury.—*Bull. Soc. pharm. Bordeaux*, 1912, v. 52, p. 337-341; also *Bull. Pharm. Sud-Est*, 1912, v. 17, p. 456-460.

Ferron, D.: Observations on the diuretic action of preparations of mercury, with bibliography.—*Arch. farmacol. sper.* 1912, v. 13, p. 283-296.

Massobino, Carlo: The hypodermic use of mercury in therapy, with formulas for a variety of preparations.—*Boll. chim. farm.* 1912, v. 51, p. 397-408.

Reynolds, Walter S.: Brief review of the method of administration of mercury in syphilis.—*Med. Rec.* 1912, v. 81, p. 1135-1137.

Freshwater, Douglas: Some uncommon methods in the treatment of syphilis by mercurial administration. This article is characterized as a timely reminder, in an editorial note.—*Lancet*, 1912, v. 183, p. 360-362, 396.

Osborne, Oliver T.: Of the very many preparations of mercury in the Pharmacopœia, at least half could be abolished.—*J. Am. M. Assoc.* 1912, v. 59, p. 1163.

For additional references see Index Med.: Zentralbl. Exper. Med.; *J. Am. M. Assoc.*; Chem. Abstr. and Chem. Zentralbl.

HYDRARGYRUM AMMONIATUM.

Smith, Carl E.: Ammoniated mercury is not "wholly" volatilized by heat, but the residue should not exceed 0.05 per cent. Solution of the compound in diluted hydrochloric acid, precipitation and weighing of the mercury as sulphide, has been found a satisfactory method of assay.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1273.

HYDRASTININÆ HYDROCHLORIDUM.

Freund, Hermann: Synthetic hydrastinine, obtained by the reduction and subsequent condensation of heliotropine.—*Therap. Monatsh.* 1912, v. 26, p. 432.

Freund and Shibata: Bi-hydrohydrastinine. A contribution to the stereochemistry of nitrogen containing combinations.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 855-861.

Grutterink, Alide: The oxidation of hydrastine to hydrastinine, and the detection of the latter by means of potassium permanganate.—*Ztschr. anal. Chem.* 1912, v. 51, p. 198-203.

HYDRASTIS.

Stingel, J. L.: Brief note on the cultivation of hydrastis.—*Am. J. Pharm.* 1912, v. 84, p. 299.

Lloyd, John Uri: The cultivation of hydrastis, with illustrations and map of its distribution.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 5-12.

Borneman, John A.: Propagation of *Hydrastis canadensis* L. is best carried on by means of dividing the roots.—*Am. J. Pharm.* 1912, v. 84, p. 553.

Henkel, Alice: Brief discussion of the cultivation of golden seal in the United States, with 4 illustrations.—*Drug. Circ.* 1912, v. 56, p. 129.

French, J. M.: Golden seal culture as a business proposition.—*Am. J. Clin. Med.* 1912, v. 19, p. 401-404.

Gehe & Co.: The cultivation of hydrastis is considered to be impracticable, though a number of articles have recently been pub-

lished reporting satisfactory experiments on a small scale.—Handelsbericht, 1912, p. 101–102.

McKesson, Irving: A quarter of a century ago golden seal root was considered high at 25 cents per pound; in the past year it sold as high as \$5.35 per pound.—Proc. N. W. D. A. 1912, p. 169.

Editorial: Golden seal has risen to the second most costly of our indigenous crude drugs, being surpassed only by ginseng.—Oil, Paint and Drug. Rep. 1912, v. 82, Sept. 30, p. 10.

McKinstry, F. P.: A study of hydrastis. Also known as eye balm, ground raspberry, Indian dye, Indian plant, Indian tumeric, Ohio curcuma, orange root, yellow eye root, yellow paint, yellow puccoon, yellow root and yellow seal.—Hahnemann. Month. 1912, v. 47, p. 604–608.

Kebler, L. F.: Golden seal is high priced and the incentive to adulteration is extremely great. It was practiced for awhile by admixture with olive pits.—J. Am. M. Assoc. 1912, v. 59, p. 1605.

Webb, E. A.: A sample of hydrastis weighing 56 pounds was found to contain $3\frac{1}{2}$ ounces of serpentary root, an admixture which has been found before.—Pharm. J. 1912, v. 89, p. 385.

J. D. Riedel, A.-G.: The ash content of hydrastis was found to vary from 4.7 to 6.3 per cent; amount of insoluble ash to 1.9 per cent.—Riedel's Berichte, 1912, p. 50.

Tunmann, O.: The microchemistry of hydrastis and the detection of the alkaloids by microsublimation and by precipitation.—Gehe & Co. Handelsbericht, 1912, p. 170–178.

Grutterink, Alide: The microchemical detection of hydrastine, hydrastinine, berberine and cotarnine; with a number of illustrations.—Chem. Weekblad, 1912, v. 9, p. 140–147; also Ztschr. anal. Chem. 1912, v. 51, p. 196.

La Wall, Charles H.: The comparative alkaloidal strength of hydrastis rootlets and rhizomes. The latter are between 1.5 and 2 times as rich in alkaloids as the former.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 142–143; also J. Am. Pharm. Assoc. 1912, v. 1, p. 799.

Dohme and Engelhardt: The amount of golden seal taken for the assay is entirely too large, considering the high percentage of hydrastine in the drug.—J. Am. Pharm. Assoc. 1912, v. 1, p. 601.

North, Horace: The official assay has one fault, the figure found is essentially arbitrary.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 37.

Schamelhout, A.: The substitution by the supplement to the Ph. Belg. III of hydrastine content for dry extract content is commended.—Bull. Soc. roy. Pharm. Bruxelles, 1912, v. 56, p. 267.

Caesar & Loretz: An outline of the Keller-Rusting-Fromme method of assay for hydrastis.—Jahres-Ber. 1912, p. 151–152.

Table showing reported variations in alkaloidal content of *hydrastis*.

Reporter.	Number of samples.	Minimum.	Maximum.	References.
		<i>Per cent.</i>	<i>Per cent.</i>	
Caesar & Loretz.....	(?)	2.66	3.62	Jahres-Ber. 1912, p. 81.
Gane, E. H.....	7	2.72	3.5	J. Am. Pharm. Assoc. 1912, v. 1, p. 500.
Jensen, H. R.....	19	2.3	3.5	Evans' An. Notes, No. 7, 1912, p. 38.
Mann, E. W.....	3	2.31	2.55	Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 13.
North, Horace.....	43	2.55	4.12	Rep. Lehm. & Fink's Analyt. Dept. 1910-1912, 1913, p. 47.
Patch, E. L.....	3	3.02	3.2	J. Am. Pharm. Assoc. 1912, v. 1, p. 500.
Scoville, Wilbur L.....	34	-2.5	+3.5	J. Am. Pharm. Assoc. 1912, v. 1, p. 1341.
Vanderkleed, Chas. E.....	5	3.80	4.85	Proc. Pennsylvania Pharm. Assoc. 1912, p. 180.

Dohme and Engelhardt: Golden seal always comes up well to the official requirements. Samples, however, with 4 per cent and more of hydrastine are not as frequent on the domestic market as in European quarters.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 101.

Linke, H.: A description of the production of fluid extract of *hydrastis* by slow percolation.—*Pharm. Praxis*, 1912, v. 11, p. 527-529.

Linke, H.: The production of the Ph. Germ. V fluid extract of *hydrastis* by means of a modified method of percolation.—*Apoth.-Ztg.* 1912, v. 27, p. 556-557.

Linke: Critical discussion of the Ph. Germ. V process for fluid extract of *hydrastis*.—*Apoth.-Ztg.* 1912, v. 27, p. 330-331.

Bukowski, A.: The valuation of fluid extract of *hydrastis*.—*Pharm. Post.*, 1912, v. 45, p. 601-603, 613-615, 621-622.

Spindler: Reports the examination of 17 samples of fluid extract of *hydrastis*, assaying from 1.04 to 3.3 per cent of hydrastine.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 11; see also p. 52.

Caesar & Loretz: The alkaloid content of fluid extract of *hydrastis* varied from 2.3 to 2.75 per cent.—*Jahres-Ber.* 1912, p. 103.

Puckner, W. A.: Examination of "colorless *hydrastis*" and "non-alcoholic fluid extract" of *hydrastis* showed that the former was but a weak solution of salts of hydrastine, while the latter varied considerably in composition.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 96; see also *J. Am. M. Assoc.* 1912, v. 59, p. 1157, and *Rep. Chem. Lab. Am. M. Assoc.* 1912, v. 5, p. 10.

Schreiber, Richard: Report on fluid extract of *hydrastis* made according to the directions in several pharmacopœias. The drug assayed 2.78 per cent and the resulting fluid extract varied from 2.319 per cent when made according to the Ph. Belg. III to 2.51 per cent when made according to the Ph. Ndl. IV. The U. S. P. fluid extract assayed 2.34 per cent of *hydrastis*.—*Apoth.-Ztg.* 1912, v. 27, p. 626-627.

Felter: Hydrastis is above all a mucous membrane remedy. It is a good bitter.—*Eclectic M. J.* 1912, v. 72, p. 476-479.

Cartier, François: As hydrastis acts in a predominating manner on the uterus, it is employed in the official preparation as a hæmodynamic in uterine hæmorrhages, particularly of the gravidic form.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 379.

Aubuchon, W. E.: Hydrastis is one of the most important agents in the Eclectic materia medica.—*Nat. Eclect. M. Assoc. Quart.* 1912-1913, v. 4, p. 124.

Burnett, J. A.: There is not a single condition in which hydrastis is of use for which there is not a better remedy, so that the high price and scarcity of hydrastis need not cause any alarm.—*Phys. Drug News*, 1912, v. 7, p. 83-84.

HYOSCINÆ HYDROBROMIDUM.

Finnemore and Braithwaite: Note on hyoscine hydrobromide, with tabulated results of 6 analyses, showing variability of commercial samples.—*Year-Book of Pharmacy*, 1912, p. 498-500; see also *Pharm. J.* 1912, v. 89, p. 136. For discussion see p. 176.

Anderson, Wm. K.: A case of morphinomania cured by the hyoscine method.—*Practitioner*, 1912, v. 88, p. 881-885.

Daniel, T. J.: A standby in morphine addiction is hyoscine. (*Eclectic Med. J.*, May).—*Am. J. Clin. Med.* 1912, v. 19, p. 843.

Innes, Arthur: Hyoscine-morphine anæsthesia in general practice.—*Practitioner*, 1912, v. 88, p. 322-326.

Wagh, William Francis: The effects of hyoscine may be readily distinguished from those of atropine, except in those cases in which the body fluids seem to possess the faculty of converting hyoscine into atropine.—*Med. Rec.* 1912, v. 82, p. 801.

HYOSCYAMINÆ HYDROBROMIDUM.

Beckurts, H.: A review of the literature relating to daturine and duboisine indicates that the product sold under these names is essentially hyoscyamine; they should no longer appear as names for alkaloids or mixtures of alkaloids.—*Apoth.-Ztg.* 1912, v. 27, p. 683-684.

Wagh, William Francis: The Pharmacopœia does not recognize the combined or amorphous alkaloids. Amorphous hyoscyamine must be crystalline hyoscyamine, which it is not, or the seller may be liable to prosecution.—*Med. Rec.* 1912, v. 82, p. 801.

Dott, D. B.: It appears that hyoscyamine sulphate and atropine sulphate differ not only in the amount of water of hydration, but in the readiness with which they are eliminated.—*Chem. & Drug.* 1912, v. 80, p. 527.

Chase, Sara T.: Hyoscyamine is preferred to atropine in vesical tenesmus, and has given marked results in sciatica to relieve twitching of the muscles.—*Am. J. Clin. Med.* 1912, v. 19, p. 86.

HYOSCYAMUS.

Mitlacher, Wilhelm: Observations on the cultivation of *Hyoscyamus niger*.—*Ztschr. allg. österr. Apoth.-Ver.* 1912, v. 50, p. 401.

Henkel, Alice: In the cultivation of henbane care should be taken to sow the seed in loose and mellow soil and barely to cover it.—*Drug. Circ.* 1912, v. 56, p. 135.

Borneman, John A.: *Hyoscyamus niger* was found to be the most difficult of all the Solanacea family to cultivate, owing to its destruction by insects.—*Am. J. Pharm.* 1912, v. 84, p. 551; see also *Brit. & Col. Drug.* 1912, v. 62, p. 254.

Gaze, R.: A review of the varying pharmacopœial requirements for belladonna, hyoscyamus, and stramonium. Several of the pharmacopœias require that these drugs be renewed annually. No justification for this requirement is apparent.—*Apoth.-Ztg.* 1912, v. 27, p. 402.

J. D. Riedel, A.-G.: The ash content of hyoscyamus was found to vary from 18.7 to 22.9 per cent; amount of insoluble ash to 6.1 per cent.—*Riedel's Berichte*, 1912, p. 49.

Caesar & Loretz: The ash content of several samples of hyoscyamus varied from 20.76 to 34.07 per cent.—*Jahres-Ber.* 1912, p. 103.

Daels, Felix: Method for the estimation of total alkaloids in powdered hyoscyamus.—*J. pharm. Anvers*, 1912, v. 68, p. 540.

Dohme and Engelhardt: The aliquot part method of assay has decided advantage over the U. S. P. process and gives very satisfactory results.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 601.

Gane, E. H.: One sample of annual leaf assayed 0.023 per cent alkaloids.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 500.

Jensen, H. R.: A dried sample of the leaves with flowering tops, grown locally, was found to contain 0.09 per cent hyoscyamine.—*Evans' An. Notes*, No. 7, 1912, p. 38.

Dohme and Engelhardt: The standard adopted by the present U. S. P. is regarded as rather high by several drug dealers. Of the samples examined in 1910, no less than 63 per cent were rejected.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 102.

Table showing reported variations in alkaloidal content of *hyoscyamus*.

Reporter.	Number of samples.	Mydriatic alkaloids.		References.
		Minimum.	Maximum.	
		<i>Per cent.</i>	<i>Per cent.</i>	
Cesar & Loretz.....		0.043	0.072	Jahres-Ber. 1912, p. 53.
Patch, E. L.....	3	.057	.118	J. Am. Pharm. Assoc. 1912, v. 1, p. 500.
Scoville, Wilbur L.....	88	.05	+ .10	J. Am. Pharm. Assoc. 1912, v. 1, p. 1341.
Vanderkleed, Chas. E.....	29	.055	.234	Proc. Pennsylvania Pharm. Assoc. 1912, p. 180.

Osborne, Oliver T.: There is no action of belladonna, stramonium, or hyoscyamus that is not that of either atropine or scopolamine; therefore, with these two alkaloids, we can do away with all of the other preparations of these three closely allied drugs.—J. Am. M. Assoc. 1912, v. 59, p. 1162.

Ellingwood, Finley: But little benefit from any other treatment will occur while delirium exists in typhoid fever. In this condition hyoscyamus is of much value in the excitable or wild form. It may be given with confidence.—Am. J. Clin. Med. 1912, v. 19, p. 488.

ICHTHYOL.

Beckurts and Frerichs: Comparative examinations of the properties of ichthyol ammonia and of several substitute products.—Arch. Pharm. 1912, v. 250, p. 478-493; see also Pharm. Ztg. 1912, v. 57, p. 864-865.

Editorial: Aufrecht gives analyses of ichthyol and ichthynat. The sulphur content should be taken into consideration in the forthcoming edition of the Ph. Brit.—Chem. & Drug. 1912, v. 81, p. 191; see also Rep. Chem. Lab. Am. M. Assoc. 1912, v. 5, p. 110-123.

Rose, A.: Ichthyol internally. A historical sketch.—Merk's Arch. 1912, v. 14, p. 215.

IODOFORMUM.

Richter, R.: The Ph. Germ. permits the presence of 0.1 per cent of residue.—Pharm. Zentrallh. 1912, v. 53, p. 749.

Brown, Linwood A.: Seven samples analyzed; six showed strong traces of soluble iodides, and five contained ash in excess of 1/10 per cent.—Proc. Kentucky Pharm. Assoc. 1912, p. 49.

Johnson & Johnson: Iodoform is uniformly 99 to 100 per cent pure.—Lab. Notes, 1912, p. 22.

Delm and Conner: The action of iodoform on organic bases. The compounds contain one, two, or three molecules of the base.—J. Am. Chem. Soc. 1912, v. 34, p. 1409-1414.

Serger, H.: Outlines a method for the valuation of surgical dressings containing iodoform.—Südd. Apoth.-Ztg. 1912, v. 52, p. 126.

Stropeni, Luigi: The idiosyncrasy to iodoform is apparently not an anaphylactic process.—*Arch. Farm. sper.* 1912, v. 14, p. 200–209.

Dewar, Thomas W.: Whooping cough treated by intravenous injections of iodoform.—*Brit. M. J.* 1912, v. 2, p. 681; see also p. 823, 906, 999.

Bates, W. A.: For slight wounds, more especially on exposed surfaces of hands and face, powdered iodoform is used and over this liquid collodion is applied to make a solid coating.—*Am. J. Clin. Med.* 1912, v. 19, p. 532.

IODUM.

Berger: The history of the discovery of iodine.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 571–572.

Gehe & Co.: The increase in the consumption of iodine and iodides is noted. The available iodine is supplied almost exclusively from Chili.—*Handelsbericht*, 1912, p. 139.

Fischer, Ulrich: On the affinity between iodine and silver.—*Ztschr. anorg. Chem.* 1912, v. 78, p. 41–67.

Meeker, G. H.: Pure arsenous oxide is recommended as the standard substance for testing volumetric iodine solutions.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 27.

Barger and Field: The blue adsorption compounds of iodine, starch, saponarin, and cholalic acid.—*J. Chem. Soc. Lond.* 1912, v. 101, p. 1394–1404.

Auger, V.: The estimation of iodine in iodides and in particular in the soda ash of wrack.—*Bull. Soc. chim. France*, 1912, v. 11, p. 615–617.

Bernegau, L. H.: Of eleven samples examined, one was below the U. S. P. standard.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 173.

Brown, Linwood A.: Thirteen samples analyzed; only one contained 94.85 per cent of iodine.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 49.

Jensen, H. R.: Fourteen samples of commercial grade with a strength 98.5 to 99.8 per cent were found to leave an ash of 0.008 to 0.15 per cent (average 0.037 per cent).—*Evans' An. Notes*, No. 7, 1912, p. 39.

Buschmann, Dietr: The permissible variation of the Ph. Germ. V tincture of iodine is too narrow, as this preparation has been shown to deteriorate rapidly.—*Pharm. Ztg.* 1912, v. 57, p. 73–74.

Frary, Guy G.: The latest edition of the Pharmacopœia gives no method of determining potassium iodide in the presence of iodine. Removal of the free iodine by heat and subsequent titration of the iodide with N/10 silver solution gives satisfactory results and is to be preferred over distillation methods, on account of time saved.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 34.

Budde, Th.: The changes in tincture of iodine on keeping. For hospital use tincture of iodine should be freshly prepared.—*Pharm. Ztg.* 1912, v. 57, p. 176; see also *Apoth.-Ztg.* 1912, v. 27, p. 203.

Droste: The fixation of free iodine in tincture of iodine. The nature of the glass has much to do with the rapidity of decomposition.—*Pharm. Ztg.* 1912, v. 57, p. 166; see also p. 177.

Ladd, E. F.: Don't leave out potassium iodide in making iodine.—*Northwestern Drug.* 1912, v. 13, Aug., p. 65.

Cook, Alfred N.: The directions of the Pharmacopœia should be closely followed in making tincture of iodine, or the potassium iodide may remain undissolved and the preparation will not stand the test.—*Rep. South Dakota F. & D. Com.* 1912, p. 75.

Thurston and Thurston: Determination of alcohol in tincture of iodine.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1155.

Barnard, H. E.: A sample labeled tincture of iodine was found to be tincture of iron.—*Rep. Indiana Bd. Health*, 1911-1912, p. 265.

Abbott: Tincture of iodine found to be improperly manufactured.—*Proc. Texas Pharm. Assoc.* 1912, p. 47.

Massachusetts Bd. Health: Two samples of tincture of iodine contained wood alcohol.—*Month. Bull.* 1912, v. 7, p. 215, 328.

Emery, J. Q.: The tincture of iodine examined was deficient in iodine, contained wood alcohol, and was prepared without potassium iodide.—*Rep. Wisconsin D. & F. Com.* 1912, p. 26.

Xrayser II: Methylated tincture of iodine is possibly still used now and again for veterinary purposes, although every good pharmacist knows that the practice is highly reprehensible.—*Chem. & Drug.* 1912, v. 81, p. 547.

Hadden, David E.: Only 23 per cent of the samples of tincture of iodine were up to the U. S. P. requirements.—*Proc. Iowa Pharm. Assoc.* 1912, p. 39.

De Barr, Edwin: Some of the samples of tincture of iodine could have been made as accurately by guess.—*Rep. Oklahoma P. H. Dept.* 1912, p. 459.

Utech, P. Henry: The circulatory displacement method has been used for the last 10 years with most happy results.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 475.

Anon.: An illustrated description of an aseptic container for tincture of iodine.—*Apoth.-Ztg.* 1912, v. 27, p. 870.

Table showing some of the analytical results reported for tincture of iodine.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
<i>Anon.</i>	50	7	Pharm. J. 1912, v. 89, p. 810.
Barnard, H. E.	27	15	Rep. Indiana Bd. Health, 1911, 1912, p. 271.
Brown, Linwood A.	107	60	Proc. Kentucky Pharm. Assoc. 1912, p. 52.
Caspari, Chas., jr.	354	204	Rep. F. & D. Com. Maryland, 1911, Baltimore, 1913, p. 15.
Cook, Alfred N.	50	22	Rep. South Dakota F. & D. Com. 1912, p. 50.
Cox, C. B.	28	12	Proc. Washington Pharm. Assoc. 1912, p. 61.
De Barr, Edwin	65	57	Rep. Oklahoma P. H. Dept. 1912, p. 458-459.
Fitz-Randolph, R. B.	47	25	Rep. New Jersey Bd. Health, 1911, 1912, p. 226.
Local Government Board, 1910-11.	20	2	Brit. & Col. Drug. 1912, v. 61, p. 62.
Halverson, J. O.	6	5	Ann. Rep. Missouri F. & D. Com. 1912, p. 9.
Howard, Chas. D.	24	7	Rep. New Hampshire Bd. Health, 1912, p. 171.
Jaffa, M. E.	8	8	Proc. California Pharm. Assoc. 1912, p. 86.
Klueter, Harry	23	12	Rep. Wisconsin D. & F. Com. 1912, p. 60.
Sayre, L. E.	4	1	Bull. Kansas Bd. Health, 1912, v. 8, p. 104.
Stallings, R. E.	156	29	Bull. Georgia Dept. Agric. No. 56, 1912, p. 125-131.
Strode, Sylvanus E.	9	5	Ann. Rep. Ohio D. & F. Com. 1911, 1912, p. 65.
Do	3	2	Rep. Ohio D. & F. Com. 1912, 1913, p. 78.
Tilford, J. Floyd	3	1	Rep. Kansas Bd. Health, 1912, p. 113.

Cassanova and Carcano: The behavior of iodine with tannin and with peptone, with report of experimental observations.—*Boll. chim. farm.* 1912, v. 51, p. 289-299.

Williams, T. W.: The use of a glycerol of iodine.—*Phys. Drug News.* 1912, v. 7, p. 266-269.

Wright, J. B.: Application of tincture of iodine and carbolic acid, equal parts, to the os uteri for the relief of vomiting of pregnancy.—*Am. J. Clin. Med.* 1912, v. 19, p. 93.

Noyes, C. Reinold: Tincture of iodine for internal use should be well aged before using, a process which is not convenient in most pharmacies. Iodine is readily dissipated in effecting solution.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 44.

Marine, David: The anatomic and physiologic effects of iodine on the thyroid gland of exophthalmic goiter.—*J. Am. M. Assoc.* 1912, v. 58, p. 1714; v. 59, p. 325-327.

McLean, Franklin C.: Up to the present it has not been shown that the organic iodine preparations, with the exception of preparations of thyroid, have any specific action in pathologic conditions.—*Arch. Int. Med.* 1912, v. 10, p. 505-520.

Ostrum, Homer I.: The surgical use of iodine.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 628-630.

Madden, Frank Cole: Iodine as a dressing for operation wounds is commended as efficacious, simple, and economical. Dalton, Frederick J. A., commends it as the sole preparation.—*Brit. M. J.* 1912, v. 2, p. 765.

Peck, J. Wicliffe: Iodine in skin asepsis, with tabulated results of experimental observations.—*Pharm. J.* 1912, v. 88, p. 450; see also Editorial note, p. 447.

Alcock, Reginald: Iodine as the sole dressing for operation wounds.—*Brit. M. J.* 1912, v. 1, p. 233-235.

Woodbury, Frank Thomas: Tincture of iodine the best surgical disinfectant; with a review of the recent literature.—*New York M. J.* 1912, v. 96, p. 101-105.

Karpeles, S. R.: Caution against the combined use of tincture of iodine on the skin and the saturation of dressings with the watery solution of mercuric chloride.—*J. Am. M. Assoc.* 1912, v. 59, p. 2254.

Wolf, W.: Iodine is almost a sovereign remedy in the promotion of the healing of wounds after operations on persons suffering from tuberculosis of the bones and soft parts.—*N. York M. J.* 1912, v. 95, p. 718.

Editorial: Nascent iodine in lupus and laryngeal tuberculosis.—*Brit. M. J.* 1912, v. 1, p. 689.

Koenig, Charles J.: Iodine fumigation in otology.—*N. York M. J.* 1912, v. 95, p. 440.

Loeb, O.: The distribution of iodine in syphilitic tissues.—*Arch. exper. Path. u. Pharmakol.* 1912, v. 69, p. 108-113.

Wilkey, A. G.: A suggestion for the more general use of iodine in first aid treatment of accidental wounds.—*Brit. M. J.* 1912, v. 2, p. 437; see also p. 527.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.* and *Chem. Zentralbl.*

IPECACUANHA.

Swain, Robert Lee: In Brazil, its birthplace, the natives knew ipecac as "ipecaaguen," which, with a slight modification, is as we have it to-day.—*Drug. Circ.* 1912, v. 56, p. 63.

Cline, R. R. D.: A study of ipecac and a review of its literature.—*Southern Pharm. J.* 1911-1912, v. 4, p. 11-13, 56-59.

Warner and Mueller: It is reported that 6,889 pounds of ipecac were shipped from Bahia to the United States in 1910 and 10,385 pounds in 1911.—*Cons. & Tr. Rep.* December 18, 1912, p. 1425.

Evans, Edward: Rio ipecac is now cultivated in the Province of Minas in Brazil with great success.—*Year-Book of Pharmacy*, 1912, p. 395.

Derry, R.: On virgin soils, or where there is a depth of vegetable humus and the situation is moist and shady, the plant grows well when established, but the properties of the root deteriorate with continued cultivation.—*Chem. & Drug.* 1912, v. 80, p. 822.

Hartwich, C.: A new ipecac root from Colombia.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 93-97.

Kemper, Graham H.: Note on ipecac production in Colombia.—*Cons. & Tr. Rep.* March 2, 1912, p. 910; see also *Pharm. Era*, 1912, v. 45, p. 246-247, and *Drug. Circ.* 1912, v. 56, p. 191.

Gehe & Co.: The available supply of *Carthagenia ipecac* has been markedly reduced during the year 1911, and the price for this variety of the drug has been correspondingly increased.—*Handelsbericht*, 1912, p. 98–99.

Richter, R.: The Ph. Germ. V still restricts ipecac to *Urgoga ipecacuanha* (Willdenow) Baillon.—*Pharm. Zentralh.* 1912, v. 53, p. 1060–1062.

J. D. Riedel, A.-G.: The ash content of ipecac was found to vary from 3.1 to 5.0 per cent; amount of insoluble to 2.1 per cent.—*Riedel's Berichte*, 1912, p. 50.

Caesar & Loretz: The ash content of Rio ipecac varied from 2.82 to 4.46 per cent, while *Carthagenia ipecac* varied between 3.89 and 5.73 per cent.—*Jahres-Ber.* 1912, p. 104.

Derlin, L.: Criticism of the Ph. Germ. V assay method for ipecac.—*Apoth.-Ztg.* 1912, v. 27, p. 805–806.

Caesar & Loretz: An outline of the Panchaud method of assay for ipecacuanha.—*Jahres-Ber.* 1912, p. 148–150.

Finnemore and Braithwaite: A glucosidal constituent of ipecacuanha, ipecacuanhin.—*Pharm. J.* 1912, v. 89, p. 136. For discussion see p. 176. See also *Year-Book of Pharmacy*, 1912, p. 496–498.

Tunmann, O.: A discussion of the microchemistry of ipecac, with illustrated description of the crystals obtained by microsublimation.—*Gehe & Co. Handelsbericht*, 1912, p. 165–170.

Daels, Felix: Method for the estimation of total alkaloids in powdered ipecac.—*J. pharm. Anvers*, 1912, v. 68, p. 541.

Dohme and Engelhardt: The amount of drug prescribed for the assay process should be reduced considerably, say to about 6 gm. The assay process otherwise is satisfactory. Other indicators should be tried.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 601.

Editorial: Johore ipecacuanha, with illustrations, and the results of assays by different analysts.—*Chem. & Drug.* 1912, v. 81, p. 615.

Marcelet and Marcellet: Note on the heating of mixtures of ether and chloroform. Apropos of the Codex method of estimating the total alkaloids of ipecac.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 676.

Reens and van der Wielen: The determination of the alkaloid content of ipecac by the method described in several pharmacopœias. The alkaloid content of a sample of the drug was found to vary from 1.54, when determined by the method official in the Ph. Germ., and 1.67 by the method official in the U. S. P., to 2.15 by the methods official in the Ph. Austr. and Ph. Fr. V.—*Pharm. Weekblad*, 1912, v. 49, p. 989–996.

Dohme and Engelhardt: Judging by the comments of Caesar & Loretz (*Hyg. Lab. Bull.* No. 63, p. 280) a better quality of ipecac seems to be shipped to Europe, as only a few lots of such a high alkaloidal percentage have been presented. Analytical data are

given for the years 1906–1911.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 102.

Table showing reported variations in alkaloidal content of ipecac.

Reporter.	Number of samples.	Minimum.	Maximum.	References.
		<i>Per cent.</i>	<i>Per cent.</i>	
Anon.....	4	1.65	2.18	Südd. Apoth.-Ztg. 1912, v. 53, p. 53.
Caesar & Loretz.....	.....	1.856	2.75	Jahres-Ber. 1912, p. 76–78.
Dohme and Engelhardt.....	94	–1.75	+2.5	<i>J. Am. Pharm. Assoc.</i> 1912, v. 1, p. 102.
Greenish and Bartlett.....	11	2.03	2.63	<i>Pharm. J.</i> 1912, v. 88, p. 202.
Jensen, H. R.....	23	1.25	2.39	Evans' An. Notes, No. 7, 1912, p. 39.
Mann, E. W.....	14	1.54	2.22	Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 13.
Patch, E. L.....	9	1.97	2.43	<i>J. Am. Pharm. Assoc.</i> 1912, v. 1, p. 501.
Seoville, Wilbur L.....	78	–1.75	+2.25	<i>J. Am. Pharm. Assoc.</i> 1912, v. 1, p. 1541.
Spindler.....	3	1.24	1.99	Südd. Apoth.-Ztg. 1912, v. 52, p. 11.
Vanderkleed, Chas. E.....	17	1.082	2.630	Proc. Pennsylvania Pharm. Assoc. 1912, p. 189.

Beck, Harvey G.: Duodenal medication by ipecac in the treatment of amœbic dysentery.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 266–279; also *J. Am. M. Assoc.* 1912, v. 59, p. 2110–2114.

Wherry, Wm. B.: The amœbacidal action of emetine.—*J. Infec. Dis.* 1912, v. 10, p. 162–165.

Rogers, Leonard: The subcutaneous injection of soluble salts of emetine is considered a specific treatment of amœbic hepatitis and amœbic dysentery. It is so rapidly beneficial in the latter as to be also of great diagnostic value.—*Brit. M. J.* 1912, v. 2, p. 405–408; see also p. 793, 813, *Lancet*, 1912, v. 183, p. 1066, and *Therap. Gaz.* 1912, v. 36, p. 837–842.

Foy, George: Brief historical note on the value of ipecac in amœbic colitis.—*Lancet*, 1912, v. 183, p. 1242.

Musgrave, W. E.: Analysis of the literature permits one general conclusion, that ipecac is a valuable drug in clinical dysentery.—*J. Am. M. Assoc.* 1912, v. 58, p. 14.

Felter: The field of therapeutic activity of ipecac is restricted chiefly to the digestive and respiratory tracts and to some extent upon the blood vessels, acting as a hæmostatic.—*Eclectic M. J.* 1912, v. 72, p. 315–317.

Mills, Walter Sands: Ipecac is of use in relieving the vomiting and diarrhoea caused by improper eating.—*J. Am. Inst. Homœop.* 1911–1912, v. 4, p. 1343–1344.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.* and *Chem. Zentralbl.*

JALAPA.

Swain, Robert Lee: Jalap, as its name indicates, is from Jalapa, a Mexican town.—*Drug. Circ.* 1912, v. 56, p. 63.

Richter, R.: The Ph. Germ. V limits the ash content of jalap to 6.5 per cent.—Pharm. Zentralh. 1912, v. 53, p. 1301.

J. D. Riedel, A.-G.: The ash content of jalap was found to vary from 3.4 to 4.8 per cent; amount of insoluble ash to 0.6 per cent.—Riedel's Berichte, 1912, p. 50.

Rusby, H. H.: Jalap may be dried by a degree of artificial heat that leaves a distinct odor of scorching, and even shows a slight superficial charring, without detriment to its medicinal properties.—J. Am. Pharm. Assoc. 1912, v. 1, p. 951.

Siedler, P.: The determination of the resin content of jalap. The assay with the Ph. Germ. V method gives slightly higher results than those obtained with two other methods tried. The differences, however, were not great.—Pharm. Ztg. 1912, v. 57, p. 15.

Dohme and Engelhardt: A shorter process of assay, depending on the exhaustion of the root with hot alcohol.—J. Am. Pharm. Assoc. 1912, v. 1, p. 601.

Caesar & Loretz: An outline of the Fromme method of determining the resin content of jalap.—Jahres-Ber. 1912, p. 169-171.

Dohme and Engelhardt: Analytical data for the years 1906-1911 show marked improvement in the quality of jalap. During the last 3 years lots containing 16 to 20 per cent of resin were not infrequent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 102.

Table showing reported variations in resin content of jalap.

Reporter.	Number of samples.	Minimum.	Maximum.	References.
		<i>Per cent.</i>	<i>Per cent.</i>	
Dohme and Engelhardt.....	113	-7	+10	J. Am. Pharm. Assoc. 1912, v. 1, p. 102.
Gane, E. H.		6.75	20.06	J. Am. Pharm. Assoc. 1912, v. 1, p. 501.
Mann, E. W.	9	5.12	21.34	Ann. Rep. Southall Bros. & Barclay, 1912, p. 13.
North, Horace.....	32	4.78	21.76	Rep. Lehn & Fink's Analyt. Dept 1910-1912, 1913, p. 49-52.
Patch, E. L.	6	7.4	13.84	J. Am. Pharm. Assoc. 1912, v. 1, p. 501
Vanderkleed, Chas. E.	13	3.67	9.66	Proc. Pennsylvania Pharm. Assoc 1912, p. 180.

KAOLINUM.

Riess, H.: Six theories of the origin of white residual kaolins are reviewed, both historically and with regard to the arguments pro and con.—J. Frankl. Inst. 1912, v. 173, p. 309.

Ladd, E.: A rapid method for the analysis of kaolin. (Mining Eng. World, v. 36, p. 1350.)—Chem. Abstr. 1912, v. 6, p. 2678.

Schneider and Richter: Kaolin is being widely used as a dusting powder. A recent controversy regarding the name is also referred to.—Pharm. Zentralh. 1912, v. 53, p. 187.

KINO.

Tunmann, O.: The quantity of kino imported into Hamburg is comparatively small and no statistics are available.—*Apoth.-Ztg.* 1912, v. 27, p. 71.

Güth, Heinrich: Some of the identity reactions for kino and catechu.—*Pharm. Zentralh.* 1912, v. 53, p. 1057-1059.

Rippetoe and Minor: Tests of identity; ferric chloride T. S. added to an aqueous solution produces a gray black precipitate.—*Am. J. Pharm.* 1912, v. 84, p. 445.

North, Horace: The U. S. P. VIII is lacking in quantitative requirements. The ash and alcohol soluble matter of 2 satisfactory lots were 1.60 and 1.86, and 93.04 and 91.06.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 53.

Mann, E. W.: Great difficulty was experienced in obtaining satisfactory supplies of kino.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 14.

Rippetoe and Minor: Three samples of kino contained from 1.47 to 2.10 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 441.

Smith, Henry G.: Tincture of kino made from the exudations of *Eucalyptus calliophylla* of B. P. strength, put up in 1896, is to-day as fluid as when made, whereas tinctures made with other kinos at the same time gelatinized years ago.—*Chem. & Drug. Australas.* 1912, v. 27, p. 86; see also p. 122.

De Barr, Edwin: Two samples of fluid extract of kino examined were not passed.—*Rep. Oklahoma P. H. Dept.* 1912, p. 424.

KRAMERIA.

Richter, R.: The Ph. Germ. V has materially enlarged on the macroscopical and microscopical descriptions of *Krameria triandra* Ruiz and Pavon.—*Pharm. Zentralh.* 1912, v. 53, p. 1063.

Rippetoe and Minor: Two samples of krameria examined, one contained 2.25 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 441.

J. D. Riedel, A.-G.: The ash content of ratanhia was found to vary from 1.4 to 4.0 per cent; amount of insoluble ash to 0.2 per cent.—*Riedel's Berichte*, 1912, p. 50.

Caesar & Loretz: A sample of krameria yielded 4.46 per cent of ash.—*Jahres-Ber.* 1912, p. 104.

Seoville, Wilbur L.: Fluid extract of krameria at the end of 3 years showed no precipitate, but seems to have thickened a little.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 337.

LACTUCARIUM.

Needham, R. H.: Let us open the door and throw this drug out. Its sole use has been to add work in materia medica and to theoretic-

cally make tincture and sirup of lactucarium.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1346.

North, Horace: A sample, the physical properties of which were normal, yielded 4.91 per cent of ash.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 53.

Rippetoe and Minor: One sample of lactucarium contained 5.30 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 441.

Caesar & Loretz: A sample of lactucarium yielded 6.9 per cent ash.—Jahres-Ber. 1912, p. 103.

Emanuel, Louis: Sirup of lactucarium, with a review of published opinions regarding it.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 151-153.

LAPPA.

Mitlacher, Wilhelm: Observations on the cultivation of *Arctium lappa* and *A. tomentosum*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 375.

Patch, Edgar L.: Burdock root yielded 7 per cent ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

LEPTANDRA.

Dohme and Engelhardt: No difficulty was experienced in securing good mandrake root in the years 1906 to 1908. During the last 3 years, however, the quality of the samples submitted has been very poor.—J. Am. Pharm. Assoc. 1912, v. 1, p. 102.

Vanderkleed, Chas. E.: The assays of 7 samples of mandrake varied from 2.890 to 3.930 per cent of resin; all below standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 180.

McEwan, Donald: Leptandrin, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

LIMONIS CORTEX.

Newton, R. Albro: The New England Branch, A. Ph. A., recommends that a spirit made from the volatile oil be made official and that the tincture be dropped.—J. Am. Pharm. Assoc. 1912, v. 1, p. 521.

Miller, Clifford: Extract of lemon, pure and adulterated, with the results of analysis of a number of samples.—Proc. Maryland Pharm. Assoc. 1912, p. 138.

Emery, J. Q.: The lemon extract examined contained wood alcohol, terpeneless lemon oil, robbed lemon oil, oil of lemon grass, artificial color, and dilute alcohol.—Rep. Wisconsin D. & F. Com. 1912, p. 26.

North, Horace: A sample made by the official process gave a specific gravity at 15.6° of 0.8952; oil, 0.8 per cent by volume; abso-

lute alcohol by volume, in the original tincture, 68.80 per cent.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 91.

The Canadian Government defines lemon extract as a flavoring extract prepared from the lemon peel, or from oil of lemon, and contains, along with more or less of the terpenes of lemon oil, not less than 0.2 per cent of citral derived from oil of lemon.—Am. Perf. 1912–13, v. 7, p. 264.

Table showing some of the analytical results reported for lemon extract.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Barnard, H. E.	49	11	Rep. Indiana Bd. Health, 1911, 1912, p. 228.
Caspari, Chas., jr.	66	18	Rep. F. & D. Com. Maryland, 1911, Baltimore, 1913, p. 15.
Do.	40	14	Rep. F. & D. Com. Maryland, 1912, Baltimore, 1913, p. 15.
Cook, Alfred N.	5	5	Rep. South Dakota F. & D. Com. 1912, p. 46.
De Barr, Edwin.	9	6	Rep. Oklahoma P. H. Dept. 1912, p. 430.
Halverson, J. O.	8	3	Ann. Rep. Missouri F. & D. Com. 1912, p. 9.
Howard, Chas. D.	38	24	Rep. New Hampshire Bd. Health, 1912, p. 169.
Klueter, Harry.	21	10	Rep. Wisconsin D. & F. Com. 1912, p. 60.
Potter, Hubert F.	9	3	Rep. Connecticut D. & F. Com. 1912, p. 12.
Tilford, J. Floyd.	7	6	Rep. Kansas Bd. Health, 1912, p. 112.

LIMONIS SUCCUS.

Needham, R. H.: Limonis succus should be left to the soda-fountain men, who are using lime juice and other vegetable acids in place of it.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1346.

LINIMENTA.

Mann, E. W.: A table showing suggested standards, ranges of specific gravity, and other requirements for Ph. Brit. liniments.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 47.

LINIMENTUM CAMPHORÆ.

North, Horace: By the U. S. P. method, some of the camphor is volatilized, the loss varying with the degree of heat and the time necessary to effect solution. A simple means of controlling the strength of the product is outlined.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 19.

Table showing some of the analytical results reported for camphor Uniment.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Brown, Linwood A.	62	35	Proc. Kentucky Pharm. Assoc. 1912, p. 49.
Fitz-Randolph, R. B.	2	1	Rep. New Jersey Bd. Health, 1911, 1912, p. 226.
Rep. Local Gov't Bd. 1910-11.	472	26	Brit. & Col. Drug. 1912, v. 61, p. 62.
Howard, Charles D.	9	8	Bull. New Hampshire Bd. Health, 1912, v. 1, p. 15.
Do.	22	14	Rep. New Hampshire Bd. Health, 1912, p. 171.
Jaffa, M. E.	27	12	Proc. California Pharm. Assoc. 1912, p. 86.
Strode, Sylvanus E.	2	2	Ann. Rep. Ohio D. & F. Com. 1911, 1912, p. 65.
Do.	1	1	Rep. Ohio D. & F. Com. 1912, 1913, p. 78.

LINIMENTUM CHLOROFORMI.

Mayer, Joseph L.: A rapid, accurate method for the quantitative estimation of chloroform in chloroform liniment.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1155. See also Am. J. Pharm. 1912, v. 84, p. 372-373.

Hommel, Philemon E.: The present preparation is too strong, on account of the soap liniment. The U. S. P. should return to the formula of 1870.—Merck's Rep. 1912, v. 21, p. 233.

LINIMENTUM SAPONIS.

Havenhill, L. D.: Twenty-one out of 45 samples of soap liniment examined were found to be at variance with the official requirements.—Proc. Kansas Pharm. Assoc. 1912, p. 61.

LINIMENTUM SAPONIS MOLLIS.

Jaffa, M. E.: Of 3 samples of tincture of green soap examined during 1910-1911, 2 were mislabeled.—Proc. California Pharm. Assoc. 1912, p. 86.

LINUM.

Bicknell, Eugene P.: *Linum usitatissimum* L., and several other species of *Linum*, are reported as growing on the island of Nantucket.—Bull. Torrey Bot. Club, 1912, v. 39, p. 418.

Gehe & Co.: The chief producers of linseed are India, Argentina, Russia, and North America.—Handelsbericht, 1912, p. 85-86.

Editorial: Statistics of the flaxseed crop of 1911 and prospects for 1912; the total yield, amounting to 12,718,000 bushels in 1910 and 19,370,000 bushels in 1911, is tabulated by States.—Oil, Paint and Drug Rep. 1912, v. 82, Aug. 26, p. 9; see also Dec. 30, p. 9.

Skinner, Robert P.: The German imports of linseed from the United States fell from 15,673 metric tons in 1908 to 886 tons in 1911; while in the last year 339.2 tons of linseed oil were exported

to the United States.—Cons. & Tr. Rep. Apr. 25, 1912, p. 337; see also May 13, 1912, p. 583.

Rusby, H. H.: The suggestion that all flaxseed would have to be rejected because no allowance is made for foreign seeds, of which there are always some, is disapproved.—J. Am. Pharm. Assoc. 1912, v. 1, p. 952.

J. D. Riedel, A.-G.: The ash content of linseed was found to vary from 3.3 to 4.5 per cent; amount of insoluble ash to 0.5 per cent.—Riedel's Berichte, 1912, p. 50.

Rothein, Herman: Tests for powdered linseed.—Svensk farm. Tidskr. 1912, v. 16, p. 24.

LIQUORES.

Mann, E. W.: A table showing suggested standards, ranges of specific gravity, and other requirements for Ph. Brit. liquores.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 48.

LIQUOR ALUMINI ACETATIS N. F.

Richter, R.: The Ph. Germ. V method for making the solution of aluminium acetate has been slightly modified.—Pharm. Zentrallh. 1912, v. 53, p. 766-768.

Valentin, J.: On the titrimetric valuation of solution of aluminum acetate.—Apoth.-Ztg. 1912, v. 27, p. 590; see also Wolfsbach, F., Pharm. Ztg. 1912, v. 57, p. 678, and Valentin, p. 634.

Richter, Ernst: Solution of aluminium acetate was found to contain iron.—Apoth.-Ztg. 1912, v. 27, p. 50.

Derlin, L.: A sample of solution of aluminum acetate was found to contain but 4.48 per cent of basic aluminum acetate.—Apoth.-Ztg. 1912, v. 27, p. 806.

Helch, Hans: On the extemporaneous preparation of Burow's solution, and the precipitation of excess of lead acetate by tartaric acid.—Pharm. Post, 1912, v. 45, p. 145-146.

Crabbé, Maurice: Comment on Burow's solution, with special reference to the pharmacopœial requirements for the several ingredients.—J. pharm. Anvers, 1912, v. 68, p. 601-605.

Koll, I. S.: Forty-two patients suffering from colon infections of the urinary tract have been absolutely cured by the local use of a solution of aluminum acetate.—J. Am. M. Assoc. 1912, v. 59, p. 69.

LIQUOR ALUMINI ACETICO-TARTRATIS N. F.

Schamelhout, A.: The solution of aluminium aceto-tartrate, described by the supplement to the Ph. Belg. III, is much more stable than the old one. The name "Burow" is spelled with only one "r."—Bull. Soc. Roy. Pharm. Bruxelles, 1912, v. 56, p. 264.

LIQUOR CALCIS.

Noyes, C. Reinold: In making lime water the U. S. P. proportions of slaked lime should be used, and it should be renewed every time a new batch is made.—Proc. South Dakota Pharm. Assoc. 1912, p. 46.

Ford, Charles M.: Protest against uncleanly methods in the preparation of lime water.—Proc. Nebraska Pharm. Assoc. 1912, p. 106.

Schulze, Louis: A strictly U. S. P. lime water may be rapidly and conveniently prepared from a calcium oxide which is marketed in airtight tubes, each containing sufficient to make 1 gallon on addition of the required amount of distilled water.—J. Am. Pharm. Assoc. 1912, v. 1, p. 152.

Hadden, David E.: Lime water was only fair, one sample was simply well water and 20 per cent were below the U. S. P. strength.—Proc. Iowa Pharm. Assoc. 1912, p. 39.

Emery, J. Q.: The lime water examined was deficient in calcium hydroxide.—Rep. Wisconsin D. & F. Com. 1912, p. 25.

Cook, Alfred N.: Lime water was found to vary very widely, and in some instances to be only tap water.—Proc. South Dakota Pharm. Assoc. 1912, p. 26.

Ladd, E. F.: Don't use the residue from lime water to make new lime water, for such has at times been found to be as efficient as pump water.—Northwestern Drug. 1912, v. 13, Aug., p. 65.

Lynch, R. L.: Hearings in connection with lime water disclosed the fact that little or no care was used to protect lime water from deterioration.—Rep. Com. District of Columbia, 1912, Washington, 1913, p. 65.

Editorial: Many druggists are very careless about the preparation and handling of lime water. Of 300 samples examined in Pennsylvania 181 were below the U. S. P. requirements.—Bull. Pharm. 1912, v. 26, p. 94.

Table showing some of the analytical results for lime water.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
<i>Anon.</i>	47	3	Pharm. J. 1912, v. 89, p. 810.
Brown, Linwood A.....	77	15	Proc. Kentucky Pharm. Assoc. 1912, p. 51.
Caspari, Chas., jr.....	361	56	Rep. F. & D. Com. Maryland, 1911, Baltimore, 1913, p. 15.
Cook, Alfred N.....	43	3	Rep. South Dakota F. & D. Com. 1912, p. 50.
Rep. Local Govt. Bd. 1910-11.....	20	3	Brit. & Col. Drug. 1912, v. 61, p. 62.
Jaffa, M. E.....	2	2	Proc. California Pharm. Assoc. 1912, p. 85.
Klueter, Harry.....	33	2	Rep. Wisconsin D. & F. Com. 1912, p. 60.
Lynch, R. L.....	35	7	Rep. Com. District of Columbia, 1912, Washington, 1913, p. 65.
Marquier, Adolph.....	7	5	Proc. New Jersey Pharm. Assoc. 1912, p. 125.
Stallings, R. E.....	10	2	Bull. Georgia Dept. Agric. No. 56 [1912], p. 115.

LIQUOR CRESOLIS COMPOSITUS.

Richter, R.: The Ph. Germ. V directions for making this preparation are readily followed.—Pharm. Zentralh. 1912, v. 53, p. 770.

Cloughly, O. J.: Formula and method of preparation for compound solution of cresol.—Proc. Missouri Pharm. Assoc. 1912, p. 132.

Bachman, Gustav: The previous saponification of the oil in making compound solution of cresol is suggested. If the pharmacopœial directions are followed it is impossible to make a preparation that will mix with water in any proportion without forming a cloudy, milky solution.—J. Am. Pharm. Assoc. 1912, v. 1, p. 843.

Raubenheimer, Otto: The U. S. P. IX will order sufficient potassium hydroxide to saponify a certain quantity.—Proc. New York Pharm. Assoc. 1912, p. 178.

Gray, Wm.: The use of equal parts by weight of cresol and saponi simplifies the process of making.—J. Am. Pharm. Assoc. 1912, v. 1, p. 510.

Ditz and Bardach: Quantitative estimation of phenol and para-cresol in their mixtures.—Biochem. Ztschr. 1912, v. 42, p. 347-356.

J. D. Riedel, A.-G.: The determination of cresol by the Ph. Germ. V method is considered unsatisfactory.—Riedel's Berichte, 1912, p. 40; see also Südd. Apoth.-Ztg. 1912, v. 52, p. 183.

McClintic, Thomas B.: The determination of the phenol coefficient of some commercial disinfectants, with and without organic matter. A report on a number of commercial disinfectants.—Hyg. Lab. Bull. No. 82, 1912, p. 35-74.

Stoops, R. P.: The treatment of burns by liquor cresolis compositus U. S. P.—Therap. Gáz. 1912, v. 36, p. 695.

Anon.: According to Coroner Cole, lysol was responsible for 9 deaths in Victoria in 1910, and 30 in 1911.—Chem. & Drug. Australas. 1912, v. 27, p. 33.

Puckner, W. A.: The Council on Pharmacy and Chemistry refuses the admission of lysol to New and Nonofficial Remedies.—Rep. Council Pharm. & Chem. 1912, p. 53-54.

Stockmann, Ralph: The therapeutic action of the cresotinic acids.—J. Pharmacol. & Exper. Therap. 1912-13, v. 4, p. 97-108.

LIQUOR FERRI ALBUMINATI N. F.

Richter, R.: The Ph. Germ. V now directs that fresh egg albumin be used in the making of solution of albuminate of iron.—Pharm. Zentralh. 1912, v. 53, p. 772-774.

Grüning, W.: Critical review of the chemistry of the albuminates of iron.—Pharm. Zentralh. 1912, v. 53, p. 1231-1235, 1264-1268.

LIQUOR FERRI ET AMMONII ACETATIS.

Egan, Thomas A.: Deterioration of Basham's mixture can be avoided by using pure chemicals and placing the finished preparation in the refrigerator, so as to avoid the varying temperature of the stores.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 295.

LIQUOR FERRI OXYCHLORIDI N. F.

North, Horace: A method for the estimation of iron is outlined.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 87.

LIQUOR FERRI PEPTONATI CUM MANGANO N. F.

Anon.: As the N. F. product does not seem to meet the needs of the medical profession, largely on account of the obnoxious odor, it becomes necessary to advocate the use of a formula that does give satisfaction. The Harrison formula, as modified by McElhenie, is recommended.—N. A. R. D. Notes, 1912-1913, v. 15, p. 893.

LIQUOR FORMALDEHYDI.

Editorial Note: Formalin should be regarded a synonym for liquor formaldehydi, B. P. C.—Pharm. J. 1912, v. 88, p. 1.

Richter, R.: The Ph. Germ. V now permits the presence of varying amounts of methyl alcohol in solution of formaldehyde. The formaldehyde content is determined by Auerbach's modification of Lemme's sulphite method.—Pharm. Zentralh. 1912, v. 53, p. 507.

Richter, R.: The Ph. Germ. V assay for solution of formaldehyde, by the use of sodium sulphite, may give misleading results because of the fact that sodium sulphite usually contains a small amount of carbonate and reacts slightly alkaline towards phenolphthalein.—Pharm. Zentralh. 1912, v. 53, p. 74.

Hill, Claude E.: Assay of formaldehyde. Tabulated comparative results, U. S. P. process, cyanide, ammonia, and iodometric processes.—Southern Pharm. J. 1911-1912, v. 4, p. 490. See also Proc. Texas Pharm. Assoc. 1912, p. 85-87.

Bernegau and E'Ve: In assaying solution of formaldehyde the flask should be shaken occasionally during the thirty minutes standing, or until gas bubbles are no longer formed on shaking.—J. Am. Pharm. Assoc. 1912, v. 1, p. 124.

Polstorff and Meyer: The action of potassium cyanide on formaldehyde. Decomposition of cyanogen.—Ber. deutsch. chem. Gesellsch. 1912, v. 45, p. 1905-1912.

La Wall, C. H.: The danger of an unintelligent use of the Hehner test for formaldehyde.—Am. Food J. 1912, v. 7, July, p. 120.

Gibbs, H. D.: The interference of hydrogen peroxide with the milk tests for formaldehyde.—*Philippine J. Sc.* 1912, v. 7, Sec. A, p. 77-78.

Editorial: The addition of sodium nitrate, which is not itself a preservative, is explicable on the ground that its presence interferes with the Hehner reaction, which is the only test recognized for the detection of formaldehyde in milk.—*Pharm. J.* 1912, v. 88, p. 196.

Hampshire and Furnival: The formaldehyde solution and tablets of commerce.—*Pharm. J.* 1912, v. 89, p. 133. For discussion see p. 174; see also *Year-Book of Pharmacy*, 1912, p. 465-471.

Dück: A sample of formaldehyde examined contained chlorides.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 516.

Strode, Sylvanus E.: One sample of formaldehyde was not passed.—*Ann. Rep. Ohio D. & F. Com.* 1911, 1912, p. 65.

Marcelet, H.: One sample of formaldehyde did not comply with the Codex.—*Bull. Pharm. Sud-Est*, 1912, v. 17, p. 532.

Scoville, W. L.: Formaldehyde often runs a little low owing perhaps to partial polymerization. Several lots tested 37.2 per cent to 38 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 500.

Locke, William Edgar: Analysis of 10 samples of commercial formaldehyde shows a variation of from 4 to 5 per cent of pure CH_2O . Fixed impurities varied between 0.0137 and 0.45 per cent.—*Proc. Virginia Pharm. Assoc.* 1912, p. 112.

Wester, D. H.: Two samples of solution of formaldehyde were found to contain 30.9 and 31.6 per cent of formaldehyde, respectively.—*Pharm. Weekblad*, 1912, v. 49, p. 407.

Reicher and Jansen: Refractometric valuation of the strength of formaldehyde solutions.—*Chem. Weekblad*, 1912, v. 9, p. 104-109.

Hammond, R. L.: Formaldehyde in the removal of verruca, clavus, callositas, nævus pigmentosus, and cornu cutaneum.—*Am. Med.* 1912, v. 18, p. 391.

McGuigan, Hugh: When formaldehyde is injected intravenously it is oxidized with surprising rapidity.—*J. Biol. Chem.* 1912, v. 11, p. xxxiii.

Walker, J. T. Ainslie: However efficient disinfection with formaldehyde vapor may be in the case of, say, scarlet fever, it can not be relied upon in that of pulmonary tuberculosis.—*Am. Med.* 1912, v. 18, p. 254.

Editorial: Contrary to the generally accepted notion as to the use of formaldehyde for fumigating rooms, this disinfectant does not act in the form of a vapor or gas.—*New York M. J.* 1912, v. 96, p. 804.

Dongan, Peter: Still another fallacy is the belief that formalin—that is, the 40 per cent solution—can be used in an aqueous solution and do good disinfecting work.—*Proc. California Pharm. Assoc.* 1912, p. 27.

Fordyce, John A.: Note of an anaphylactic condition in laboratory workers produced by formalin.—*Med. Rec.* 1912, v. 81, p. 208.

Watt, James: Report of a case of acute formaldehyde poisoning. Formaldehyde probably differs little in degree of toxicity from carbolic acid.—*Brit. M. J.* 1912, v. 2, p. 350.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.*; *Exper. Sta. Rec.* and *Chem. Zentralbl.*

LIQUOR MAGNESII CITRATIS.

Tanner, T. Bernard: Suggested improvement in method of manufacture of magnesium citrate.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 444.

England, Joseph W.: Two formulas are suggested.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 440-443.

Schulze, Louis: To prevent the formation of fungus growths in solution of magnesium citrate, it should be prepared by heating the distilled water to the boiling point for about half an hour, then adding the magnesium carbonate and citric acid.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 151.

Fritzinger, Richard J.: A modified formula for solution of magnesium citrate, with reasons therefor.—*Drug. Circ.* 1912, v. 56, p. 312-313.

Linnett, William M.: Method for the preparation of magnesium citrate in a hurry, with an illustration of the apparatus used.—*Pract. Drug.* 1912, v. 30, December, p. 34.

Blair, Henry C.: A desirable preparation can be made by omitting the flavor, using sugar instead of syrup of citric acid and using boiling water to dissolve the acid, magnesia, and sugar.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 294-295.

Ford, Charles M.: Comment on the need of care and cleanliness in the preparation of effervescent citrate of magnesia.—*Proc. Nebraska Pharm. Assoc.* 1912, p. 103.

Raubenheimer, Otto: We need official methods of testing various preparations, as, for instance, solution of citrate of magnesium.—*Proc. New York Pharm. Assoc.* 1912, p. 137.

François and Lasausse: The analysis of purgative lemonade or magnesium citrate. A discussion of the qualitative and quantitative determination of the several constituents.—*J. pharm. et chim.* 1912, v. 6, p. 204-210; see also *Ann. falsif.* 1912, v. 5, p. 429-433.

Wulling, Frederick J.: One sample of solution of magnesium citrate assayed satisfactorily.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1122.

Brown, Linwood A.: Four samples analyzed; two deficient in either MgO, or citric acid.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 49.

Street, John Phillips: Of 12 samples of solution of magnesium citrate examined during 1912, 8 were adulterated or below standard.—*Rep. Connecticut Agric. Exper. Sta.* 1912, p. 208.

LIQUOR PICIS ALKALINUS N. F.

Patch, E. L.: Great variation is found in this preparation, due to the difference in formulas.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 375.

Roemer, John: For real scientific advancement consistent with definite standards, this has everything beaten before the start.—*Drug. Circ.* 1912, v. 56, p. 247.

Editorial Note: A synonym liquor carbonis detergens proposed for the N. F. is objected to.—*Pharm. J.* 1912, v. 88, p. 1.

Caldwell, Paul: Disinfectants are made too cheaply these days to have an alcoholic solution thrust upon us.—*Drug. Circ.* 1912, v. 56, p. 69.

LIQUOR POTASSII ARSENETIS.

Hoger: The solution of potassium arsenite of the Ph. Germ. V. A criticism of the formula and requirements.—*Apoth.-Ztg.* 1912, v. 27, p. 235; see also p. 932, and *Pharm. Zentrallh.* 1912, v. 53, p. 1206.

Krüer, Hero: The production of the solution of potassium arsenite by the Ph. Germ. V method is considered more satisfactory than with the former method.—*Pharm. Ztg.* 1912, v. 57, p. 786.

Bachman, Gustav: Modified formula and method of preparation is suggested.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 843.

Cook, Alfred N.: Every time a bottle containing Fowler's solution is opened, a little air is let in which oxidizes a small portion of the arsenic and weakens the solution.—*Rep. South Dakota F. & D. Com.* 1912, p. 75.

Emery, J. Q.: The liquor potassii arsenitis examined was deficient in the active principle.—*Rep. Wisconsin D. & F. Com.* 1912, p. 25.

Cook, Alfred N.: Fowler's solution was found to vary from 47 per cent to 257 per cent of U. S. P. strength.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 26.

Table showing some of the analytical results reported for solution of potassium arsenite.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Caspari, Chas., jr.	404	69	Rep. F. & D. Com. Maryland, 1912, Baltimore, 1913, p. 15.
Cook, Alfred N.	21	4	Rep. South Dakota F. & D. Com. 1912, p. 50.
De Barr, Edwin.	10	5	Rep. Oklahoma P. H. Dept. 1912, p. 428.
Fitz-Randolph, R. B.	18	16	Rep. New Jersey Bd. Health, 1911, 1912, p. 226.
Howard, Chas. D.	6	1	Rep. New Hampshire Bd. Health, 1912, p. 171.
Ladd, E. F.	59	8	Bull. Agric. Exper. Sta. North Dakota, v. 2, p. 138-139.
Stallings, R. B.	52	25	Bull. Georgia Dept. Agric. No. 56 [1912], p. 117-120.

LIQUOR POTASSII HYDROXIDI.

Cook, Alfred N.: Of 7 samples of solution of potassium hydroxide examined, varying from 81 to 106 per cent of U. S. P. strength, 1 was not passed.—Rep. South Dakota F. & D. Com. 1912, p. 50.

Howard, Chas. D.: Of 6 samples of liquor potassii hydroxidi examined, 1 was not conformable.—Rep. New Hampshire Bd. Health, 1912, p. 171.

LIQUOR SODÆ CHLORINATÆ.

Walker and Gegenheimer: Some factors in the cost of sodium hypochlorite production.—Chem. Trade J. 1912, v. 51, p. 513-514; see also Chem. Eng. 1912, v. 16, p. 233-235.

Lewis, William Cudmore McCullagh: Photo-kinetics of sodium hypochlorite solutions.—J. Chem. Soc. Lond. 1912, v. 101, p. 2371-2382.

Kershaw, John B. C.: Hypochlorite solutions for bleaching and disinfecting purposes.—Chem. Trade J. 1912, v. 50, p. 277-278, 385.

Kelly, E. F.: The directions of the National Formulary for preparing solution of chlorinated potassa, with the modification that the final quantity required be 1000 gm., would seem better suited to the preparation of solution of chlorinated soda with, of course, the necessary change in ingredients and quantities.—Proc. Maryland Pharm. Assoc. 1912, p. 132-134.

LIQUOR SODII PHOSPHATIS COMPOSITUS.

Bernstein, Mitchell: The use of the exsiccated sodium salt appears very satisfactory; in the many preparations made therewith no crystallization has ever occurred.—Am. J. Pharm. 1912, v. 84, p. 399.

LITHII CARBONAS.

Berger, Fr.: A review of the discovery, occurrence, behavior, and uses of lithium.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 52, p. 597-602.

Needham, R. H.: A salt with a reputation never established. Said to be a uric acid and calculi solvent, but probably insoluble in the stomach. Its affinity for acid phosphates is questionable.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1347.

North, Horace: The salt is not soluble in 75 parts of pure water, as required by the U. S. P.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 57.

LOBELIA.

Swain, Robert Lee: Lobelia was named after Lobel, a Flemish botanist. In *Lobelia inflata*, the seeds are borne in an oval-shaped pod, hence the name.—Drug. Circ. 1912, v. 56, p. 64.

Richter, R.: The Ph. Germ. V now directs that lobelia is to be gathered toward the end of flowering.—Pharm. Zentralh. 1912, v. 53, p. 593.

Rippetoe and Minor: Two samples of lobelia contained 7.62 and 8.20 per cent of ash respectively.—Am. J. Pharm. 1912, v. 84, p. 441.

Caesar & Loretz: A sample of lobelia yielded 6.85 per cent of ash.—Jahres-Ber. 1912, p. 103.

J. D. Riedel, A.-G.: The ash content of lobelia was found to vary from 5.1 to 10.3 per cent; amount of insoluble ash to 1.6 per cent.—Riedel's Berichte, 1912, p. 49.

Patch, E. L.: Lobelia herb was found to contain 0.6 per cent alkaloid.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Stir-Smith, Florence: No native drug ever employed in American medicine has had such an interesting and notorious history as *Lobelia inflata*.—Eclectic M. J. 1912, v. 72, p. 135-139.

Blankmeyer, H. H.: Hypodermic lobelia in cerebral concussion and in asthma.—Ellingwood's Therap. 1912, v. 6, p. 14-15.

Halverson, H. M.: Hypodermic lobelia in tetanus; with reports of two cases occurring in horses.—Ellingwood's Therap. 1912, v. 6, p. 91-92.

Johnson, Nat L.: The use of hypodermic lobelia in threatened abortion.—Ellingwood's Therap. 1912, v. 6, p. 292-293.

Jones, Henry F.: Hypodermic lobelia in pseudomembranous croup.—Ellingwood's Therap. 1912, v. 6, p. 58.

Isenberg, C. D.: A boy of twelve years died of diphtheria in spite of three injections of lobelia, and other measures.—Ellingwood's Therap. 1912, v. 6, p. 14.

LUPULINUM.

Caesar & Loretz: Lupulin with not more than 10 per cent of ash was not obtainable during the year, much of the commercial article containing from 20 to 25 per cent of ash.—Jahres-Ber. 1912, p. 60.

North, Horace: Only 4 of the 17 samples analyzed met the U. S. P. requirements, the highest and lowest percentage of ash being 38.25 and 6.60, respectively.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 58.

Patch, Edgar L.: Lupulin yielded from 9 to 16 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

Caesar & Loretz: The examination of several samples of lupulin showed a variation in ash content of from 11.2 to 23.0 per cent.—Jahres-Ber. 1912, p. 103.

LYCOPODIUM.

Richter, R.: The Ph. Germ. V limits the ash content of lycopodium to 3 per cent.—Pharm. Zentralh. 1912, v. 53, p. 780.

Caesar & Loretz: An outline of the method employed for determining the ash content of lycopodium, and an enumeration of the limitations included in the several pharmacopœias.—Jahres-Ber. 1912, p. 143.

Roberts, J. G.: Report on two samples of lycopodium substitutes, composed of treated starch grains colored with a substance which, when treated with dilute acid, turns pink, indicating the presence of methyl orange.—Oil, Paint and Drug Rep. 1912, v. 82, Dec. 23, p. 11.

North, Horace: Eight samples gave an ash varying from 1.36 to 4.10 per cent. The adulterant was organic matter.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 59.

Rippetoe and Minor: Ten samples of lycopodium examined yielded from 1.10 to 3.35 per cent ash. Only two of the samples exceeded 1.42 per cent ash and both of these samples were found to contain sand.—Am. J. Pharm. 1912, v. 84, p. 445.

Gehe & Co.: The ash content of available supplies of lycopodium was found to vary from 1.6 to 2.9 per cent.—Handelsbericht, 1912, p. 76-77.

Caesar & Loretz: The ash content of lycopodium was found to vary between 1.2 and 2.7 per cent.—Jahres-Ber. 1912, p. 103.

Fyfe: Lycopodium is employed in catarrhal gastritis with much advantage, and is especially desirable when the wrong is characterized by soreness over the stomach.—Eclectic M. J. 1912, v. 72, p. 531-532.

MAGMA OF BISMUTH.

Anon.: At a regular meeting of the New York Branch of the A. Ph. A., the use of trade-marked names in connection with milk of bismuth was commented upon. The recognition of a method for the assay of this preparation was considered advisable.—Drug Topics, 1912, v. 27, p. 35.

MAGMA MAGNESIÆ N. F.

Anon.: A reference to cream of magnesia or milk of magnesia of the B. P. C. shows a tinkering with formulæ and with synonyms which seems to be needless and irritating. No explanation is given of the increase of strength. Why should changes be made like this and made without explanation in a volume that is supposed to be a standard?—Chem. & Drug. Australas. 1912, v. 27, p. 40.

MAGNESII CARBONAS.

Fortini, V.: A contribution on the estimation of magnesia in magnesium carbonate in mixtures with asbestos.—Chem. Ztg. 1912, v. 36, p. 270–271.

Richter, Ernst: Magnesium carbonate was found to contain sulphates and iron.—Apoth.-Ztg. 1912, v. 27, p. 50.

Street, John Phillips: Of 18 samples of magnesium carbonate examined 7 were short weight, one misbranded, and 4 compound.—Rep. Connecticut Agric. Exper. Sta. 1912, p. 208.

Rep. Local Govt. Bd. 1910–11: Of 58 samples of magnesia and preparations 3 were found to be adulterated or not up to standard.—Brit. & Col. Drug. 1912, v. 61, p. 62.

MAGNESII OXIDUM.

J. D. Riedel, A.-G.: Five cc. of acetic acid are considered to be insufficient to dissolve the residue from 0.8 gm. of magnesium oxide. Theoretically 8 cc. of acid are required.—Riedel's Berichte, 1912, p. 40; see also Südd. Apoth.-Ztg. 1912, v. 52, p. 183.

Gane, E. H.: Magnesia labeled "For technical purposes only," but sent for medicinal use, assayed from 86.6 to 95.9 per cent pure.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Brown, Linwood A.: Three samples analyzed; one contained excessive amount of water of hydration, two excessive amount of water soluble constituents.—Proc. Kentucky Pharm. Assoc. 1912, p. 49.

Cronin, Charles A.: Nine samples of light magnesium oxide contained moisture, in some instances amounting to 45 per cent. In 3 samples much carbonate was present.—Proc. Massachusetts Pharm. Assoc. 1912, p. 100.

Mann, E. W.: The heavy variety of magnesia is frequently contaminated with sulphates.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 40.

Düick: A sample of magnesia usta contained carbonate.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 516.

MAGNESII SULPHAS.

North, Horace: The impurity most frequently found in commercial Epsom salt is calcium sulphate.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 60.

Pearson, W. A.: The chlorides present in many samples of commercial magnesium sulphate estimated as magnesium chloride amount to over 0.3 per cent.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 174; see also Wolter, F., Pharm. Ztg. 1912, v. 57, p. 472.

Barnard, H. E.: Two samples labeled Epsom salts were found to be potassium nitrate.—Rep. Indiana Bd. Health, 1911, 1912, p. 265.

Carper, T. E.: Of 10 samples of magnesium sulphate purchased in the open market, but 2 were of U. S. P. standard in physical appearance.—Proc. Virginia Pharm. Assoc. 1912, p. 115-117.

Barnard, H. E.: Of 4 samples of Epsom salts examined, 2 were found to be illegal.—Rep. Indiana Bd. Health, 1911, 1912, p. 276.

Anon.: Of 77 samples of Epsom salts analyzed under the sale of food and drugs acts during 1911, 8 were found to be adulterated or not up to standard.—Pharm. J. 1912, v. 89, p. 810; see also Rep. Local Govt. Bd. 1910-11, Brit. & Col. Drug. 1912, v. 61, p. 62.

Beringer, Geo. M.: A proposed N. F. monograph for dried magnesium sulphate, which, when dried at 100°, should correspond to from 77.5 to 81.5 per cent absolute magnesium sulphate.—J. Am. Pharm. Assoc. 1912, v. 1, p. 253.

Puckner and Warren: The dried salt, if monohydrated, should contain 87 per cent of anhydrous salt; if dihydrated, 77 per cent. Commercial samples varied from 54.27 to 67.2 per cent anhydrous salt.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Patch, E. L.: Dried magnesium sulphate tested 95 per cent monohydrated.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Burnett, J. A.: Palatable magnesium sulphate; a solution of magnesium flavored with coffee and vanilla and sweetened with saccharin.—Phys. Drug News, 1912, v. 7, p. 191-192.

Brown, Thomas R.: Studies on the motor functions of the stomach by the use of gastric and duodenal fistulas.—Am. J. M. Sc. 1912, v. 144, p. 682-697.

Editorial: For the present, Glauber's and Epsom salts may remain in the group of the saline purgatives which owe their efficiency to the difficulty which they present to the processes of absorption.—J. Am. M. Assoc. 1912, v. 59, p. 38.

Smith, F. A. Upsher: Epsom salt, in doses of 1 drachm, 2 or 3 times a day, has been found to be a cure for warts.—J. Am. Pharm. Assoc. 1912, v. 1, p. 841.

Jackson, Algernon Brashear: The treatment of rheumatism by injection of a 25 per cent solution of magnesium sulphate.—*Practitioner*, 1912, v. 88, p. 177-179.

Parker, George: Treatment of tetanus with magnesium sulphate, with report of three cases.—*J. Am. M. Assoc.* 1912, v. 58, p. 1746.

Smithson, Oliver: Two cases of tetanus treated by subdural injections of magnesium sulphate. The question of correct dosage one of great difficulty.—*Brit. M. J.* 1912, v. 1, p. 181.

Camus, Jean: The treatment of tetanus by magnesium sulphate, phenol and antitetanic serum; protocol of experiments.—*Compt. rend. Soc. Biol.* 1912, v. 72, p. 109-112.

Dykens, W. A.: Report of the successful use of magnesium sulphate for the treatment of tetanus in a heifer (*Vet. Rec.*).—*Am. Vet. Rev.* 1911-1912, v. 40, p. 510.

Sieber, Dietmar: Subcutaneous injection of magnesium sulphate as an antidote in arsenic poisoning.—*Arch. Internat. Pharm. et Thérap.* 1912, v. 22, p. 269-282.

MALTUM.

Dohme and Engelhardt: It is advisable to give assay processes for the determination of maltose and diastatic powder. We have met with numerous samples of malt which were deficient in both respects.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 601.

Heusch, Eugenio: On the influence of salicylic acid on the diastatic action of aqueous extract of malt.—*Arch. farmacol. sper.* 1912, v. 13, p. 307-323.

v. Laer, Henri: The special effect of temperature on the diastatic properties of malt.—*Bull. Soc. Chim. Belg.* 1912, v. 26, p. 18-28.

v. Laer, Henri: On the condition of diastase of malt after exerting its activity.—*Bull. Soc. Chim. Belg.* 1912, v. 26, p. 223-226.

Brady, Jules M.: Malt soup in nutritional disturbances of infants.—*J. Am. Assoc.* 1912, v. 58, p. 751.

MANGANI SULPHAS.

North, Horace: It was necessary to reject one shipment of manganese sulphate because the crystals contained 5 molecules of water of crystallization in place of 4 molecules, as required by the U. S. P.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 60.

Blum, William: Determination of manganese as sulphate and by the sodium bismuthate method.—*J. Am. Chem. Soc.* 1912, v. 34, p. 1379-1398.

Wagenaar, M.: Potassium chromate as a microchemical reagent for manganese.—*Pharm. Weekblad*, 1912, v. 49, p. 14-15.

Needham, R. H.: Manganese sulphate as a tonic has completely fallen into disuse, other tonics having taken its place. It should be dropped.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1347.

MANNA.

Needham, R. H.: Manna should be dropped with the only preparation into which it enters, i. e., compound infusion of senna, another heirloom preparation.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1346.

Rusby, H. H.: The wording of the proposed description will exclude more than two-thirds of the manna of good quality. Great embarrassment has been caused the Federal authorities by the present text in this very direction.—J. Am. Pharm. Assoc. 1912, v. 1, p. 952.

Caesar & Loretz: Considerable care is necessary in the purchasing of manna, some samples being adulterated with sugar.—Jahres-Ber. 1912, p. 66-67.

MARRUBIUM.

Mansfield, William: *Marrubium vulgare* U. S. P. and *M. perigrinum*, with four illustrations.—Pract. Drug. 1912, v. 30, December, p. 46-48.

Mitlacher, Wilhelm: Observations on the cultivation of *M. vulgare*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 410.

J. D. Riedel, A.-G.: The ash content of marrubium was found to vary from 16.3 to 16.9 per cent; amount of insoluble ash to 2.4 per cent.—Riedel's Berichte, 1912, p. 51.

MASSA FERRI CARBONATIS.

Metz, Leroy: Modified method for the preparation of Vallet's Mass.—Proc. Kansas Pharm. Assoc. 1912, p. 88-91.

MASTICHE.

Tunmann, O.: The annual crop of mastiche on the Island of Chios is estimated as being from 30,000 to 40,000 kilos.—Apoth.-Ztg. 1912, v. 27, p. 71.

MATICO.

Rippetoe and Minor: Two samples of matico leaves contained 13.80 and 13.90 per cent of ash, respectively.—Am. J. Pharm. 1912, v. 84, p. 442.

MATRICARIA.

Mitlacher, Wilhelm: Observations on the cultivation of *Matricaria chamomilla*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 410.

Gehe & Co.: The German crop of chamomile for 1911 was distinctly larger than was the crop for 1910, though the crop in Hungary was practically a failure.—Handelsbericht, 1912, p. 64.

Schimmel & Co.: The specific gravity of German chamomile oil ranges from 0.924 to 0.945.—Semi-Annual Report, 1912, April, p. 138.

MEL.

Baehr, Max J.: It is reported that 819,199 pounds of honey were exported from Cienfuegos in 1911, of which 82,768 pounds went to the United States.—Cons. & Tr. Rep. October 9, 1912, p. 150.

Spaeth, Eduard: Review of progress made in the examination of honey during the years 1910 and 1911.—Südd. Apoth.-Ztg. 1912, v. 52, p. 596.

Utz: A review of the progress made in the chemistry of honey.—Pharm. Praxis, 1912, v. 11, p. 280-281.

Thomann: A contribution on the examination of honey.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 629-630.

Witte, H.: The examination of honeys. A review of the literature relating to the detection of the several constituents of honey.—Ztschr. öffentl. Chem. 1912, v. 18, p. 362-373, 390-397.

North, Horace: It is a well known fact that raw honey contains a principle capable of inverting ordinary sugar. Whether this fact is ever taken advantage of on a commercial scale to sophisticate natural honey, is not stated.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 45.

Becker, M.: One sample was found which was evidently adulterated with cane sugar.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 172.

Bernegau and E'Ve: The U. S. P. test for "absence of cane sugar" in honey is unreliable.—J. Am. Pharm. Assoc. 1912, v. 1, p. 125.

Achert, O.: The inversion of saccharose by honey. The invertin and amylase of honey, when not heated to above 55°, will reduce the saccharose content of a mixture from 20 to approximately 2 per cent within 4 months.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 23, p. 136-139.

Gehe & Co.: The Fiehe method for the differentiation of natural and factitious honeys is recommended for inclusion in the Pharmacopœia.—Handelsbericht, 1912, p. 78-80.

Halphen, G.: The Fiehe reaction in the analysis of honey.—Ann. falsif. 1912, v. 5, p. 116-121.

Fincke, Heinrich: The formic acid content of honey. A contribution on the determination of formic acid in foods.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 23, p. 255-267.

Büttner, G.: The occurrence of boric acid in pure honey while frequent is not constant.—*Ztschr. Unters. Nahr. u. Genussm.* 1912, v. 23, p. 139–140.

Gottfried, Arthur: On the manganese and phosphorous content of honeys.—*Pharm. Zentrallh.* 1912, v. 53, p. 1440–1443.

Fehlmann, C.: Contributions on the microscopical examination of honey.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 149–153; see also Book Review, *Pharm. Zentrallh.* 1912, v. 53, p. 268.

Frey, R.: The testing of pharmaceutical preparations of honey.—*Pharm. Ztg.* 1912, v. 57, p. 719.

Meyer, Rud.: On an infectious disease of bees.—*Apoth.-Ztg.* 1912, v. 27, p. 725–726.

For additional references see *Ztschr. Unters. Nahr. u. Genussm.*; *Chem. Zentrallh.* and *Chem. Abstr.*

MENTHA PIPERITA.

Henkel, Alice: Peppermint growing has attained very large proportions in the United States and is well established in Michigan, New York, and Indiana. The method of cultivation is outlined.—*Drug. Circ.* 1912, v. 56, p. 128.

Mitlacher, Wilhelm: Observations on the cultivation of *Mentha piperita*.—*Ztschr. allg. österr. Apoth.-Ver.* 1912, v. 50, p. 422; see also *Südd. Apoth.-Ztg.* 1912, v. 52, p. 550.

Pearson, W. A.: A sample of peppermint leaves and one of peppermint herb were examined which contained spearmint leaves and spearmint herb, respectively.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 174.

J. D. Riedel, A.-G.: The ash content of peppermint leaves was found to vary from 10.8 to 12.7 per cent; amount of insoluble ash to 1.5 per cent.—*Riedel's Berichte*, 1912, p. 49.

Table showing some of the analytical results reported for spirit of peppermint.

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Barnard, H. E.	23	17	Rep. Indiana Bd. Health, 1911, 1912, p. 268.
Brown, Linwood A.	63	32	Proc. Kentucky Pharm. Assoc. 1912, p. 51.
Caspari, Chas., jr.	27	5	Rep. F. & D. Com. Maryland, 1911, Baltimore, 1913, p. 15.
Do.	4	1	Rep. F. & D. Com. Maryland, 1912, Baltimore, 1913, p. 15.
Cox, C. B.	72	42	Proc. Washington Pharm. Assoc. 1912, p. 61.
Havenhill, L. D.	20	10	Proc. Kansas Pharm. Assoc. 1912, p. 61.
Howard, Charles D.	9	4	Bull. New Hampshire Bd. Health, 1912, v. 1, p. 7–8.
Do.	20	9	Rep. New Hampshire Bd. Health, 1912, p. 170.
Jaffa, M. E.	7	7	Proc. California Pharm. Assoc. 1912, p. 86.
Massachusetts Bd. Health.	4	4	Monthly Bulletin, 1912, v. 7, p. 38, 328.
Sayre, L. E.	6	2	Bull. Kansas Bd. Health, 1912, v. 8, p. 105.
Do.	4	2	Bull. Kansas Bd. Health, 1912, v. 8, p. 149.
Strode, Sylvanus E.	1	1	Rep. Ohio D. & F. Com. 1912, 1913, p. 79.
Tilford, J. Floyd.	10	3	Rep. Kansas Bd. Health, 1912, p. 113.

MENTHA VIRIDIS.

Mitlacher, Wilhelm: Observations on the cultivation of *Mentha crispa*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 421.

J. D. Riedel, A.-G.: The ash content of spearmint was found to vary from 10.9 to 13.3 per cent; amount of insoluble ash to 1.5 per cent.—Riedel's Berichte, 1912, p. 51.

Fitz-Randolph, R. B.: Of 25 samples of spirit of spearmint examined 18 were below standard.—Rep. New Jersey Bd. Health, 1911, 1912, p. 226.

MENTHOL.

Mitlacher, Wilhelm: Observations on the cultivation of *Mentha canadensis* var. *piperascens* or Japanese mint.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 421.

Anon.: Japanese exports of menthol in 1911 amounted to 151,538 lbs.—Am. Perf. 1912-13, v. 7, p. 207.

Editorial: The rapidly increasing use of menthol in Europe and the United States during the past two years is leaving but a narrow margin between consumption and production. The United States imports increased from 20,183 pounds in 1908 to 50,533 pounds in 1911.—Chem. & Drug. 1912, v. 81, p. 614-615; see also Editorial, Oil, Paint, and Drug Rep. v. 82, Nov. 4, p. 9.

Thoms, H.: The production of menthol in Germany and in the German Colonies is considered as being economically practicable.—Arb. pharm. Inst. Univ. Berl. 1911, 1912, p. 47-50; see also Apoth.-Ztg. 1912, v. 27, p. 157.

North, Horace: It is recommended that the requirement for melting point be changed from 43° to 42-43°.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 60.

Richter, R.: The Ph. Germ. V now gives the melting point of menthol as 44°.—Pharm. Zentralh. 1912, v. 53, p. 803.

Kebler, L. F.: Menthol is usually made of a grade just passing the lowest requirements by the pharmacopœial test.—J. Am. M. Assoc. 1912, v. 59, p. 1604.

Mindes, J.: Reports that menthol dissolves in fuming nitric acid with an orange-yellow color, active effervescence and the elimination of nitrous fumes.—Südd. Apoth.-Ztg. 1912, v. 52, p. 93.

McWalter, J. C.: The popular use of menthol appears to be falling off. It is noteworthy that some recent experiments put menthol, followed by cocaine doubtfully, as the only substances, locally applied, capable of relieving surface pains.—Brit. & Col. Drug. 1912, v. 61, p. 106.

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Doolittle, R. E.: Many of the methods of analysis, as well as physical constants, given in the current edition of the *Pharmacopœia* were found to be not up to date.—*Ann. Rep., U. S. Dept. Agric.* 1912, Washington, 1913, p. 559.

Kebler, L. F.: The standards for the essential oils and the methods for arriving at the same are very inadequate.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1405.

Editorial: The U. S. P. is weakest, probably, in regard to essential oils, and as long as five years ago the Government was forced to admit that when nature and the U. S. P. disagreed, in regard to the optical rotation of lemon oil, it was entirely possible for nature to be correct.—*Am. Perf.* 1912-13, v. 7, p. 203.

Frey, Robert: On the testing of volatile oils according to the *Ph. Germ. V.* A discussion of the optical rotation requirements included in that *Pharmacopœia*.—*Pharm. Ztg.* 1912, v. 57, p. 785.

Umney and Parry: Unification of processes for commercial analysis and valuation of essential oils.—*Eighth. Internat. Cong. Appl. Chem.* 1912, v. 26, p. 341-347; see also *Chem. & Drug.* 1912, v. 81, p. 445.

Jeaneard and Satie: Contribution to the unification of methods of analysis of essential oils.—Eighth Internat. Cong. Appl. Chem. 1912, v. 26, p. 331–339; see also Editorial, Pharm. J. 1912, v. 89, p. 390.

Dodge, Francis D.: The oxidation assay of essential oils.—Eighth Internat. Cong. Appl. Chem. 1912, v. 6, p. 86–92. For discussion see Vol. 28, p. 51; see also J. Ind. & Eng. Chem. 1912, v. 4, p. 592–593.

Anon.: Section VIIIb of the Eighth International Congress of Applied Chemistry requests the approval of the organization of an international committee to collect information from every available source on chemical products and the essential oils used in pharmacy.—Chem. & Drug. 1912, v. 81, p. 515.

Editorial: Review of some of the essential oils in 1911.—Brit. & Col. Drug. 1912, v. 61, p. 41.

Anon.: A review of some recent publications on volatile oils.—Pharm. Post, 1912, v. 45, p. 25–28.

Müller, W.: Progress in the chemistry of volatile oils and perfumes.—Fortschr. Chem. 1912, v. 6, p. 241–258.

Schimmel & Co.: Comprehensive notes and scientific information on essential oils and a review of recent research.—Semi-Annual Report, 1912, April & October.

Roure-Bertrand, Fils: Original scientific observations on essential oils, with an industrial review of recent publications on perfumes and essential oils.—Sci. & Ind. Bull. April and October, 1912.

Reclaire, A.: A review of the progress made in connection with volatile oils and odorous principles from July, 1911, to August, 1912.—Ztschr. ang. Chem. 1912, v. 25, p. 2580–2589.

Umney and Bennett: Commercial esters used in perfumery and for flavoring purposes, with a table showing the results of examination of commercial esters.—Year-Book of Pharmacy, 1912, p. 413–417; see also Pharm. J. 1912, v. 89, p. 134.

Enklaar, C. J.: On the synthesis of an aliphatic terpene.—Chem. Weekblad, 1912, v. 9, p. 68–72.

Gattermann, Ludwig: A report of experimental work on the syntheses of aromatic aldehydes.—Ann. Chem. 1912, v. 393, p. 315–233.

Ludborough and Turner: The esterification constants of some substituted acetic and benzoic acids.—J. Chem. Soc. Lond. 1912, v. 101, p. 237–240.

Hill and Cocking: The neutral sulphite method for the determination of aldehydes in essential oils other than lemon oil is preferred.—Chem. & Drug. 1912, v. 81, p. 523; see also Umney, J. C., p. 562.

Hall and Harvey: Outline of a method for the separation and estimation of glyceryl acetate in essential oils.—Am. Perf. 1912–1913, v. 7, p. 282.

Schimmel & Co.: During the past year the malpractice of adulteration has attained dimensions never previously known in our branch.—Semi-Annual Report, 1912, April, p. 8.

Editorial: Essential oil adulteration is a fine art which numbers among its votaries some of the keenest scientific minds.—Drug. Circ. 1912, v. 56, p. 374.

Umney, John C.: The commerce of essential oils.—Chem. & Drug. 1912, v. 80, p. 845.

Reclaire, A.: Progress in the chemistry of terpenes and volatile oils.—Chem. Ztg. 1912, v. 36, p. 1125–1126, 1150–1152, 1161–1163.

Wallach, and others: Further contributions to the knowledge of terpenes and volatile oils.—Ann. Chem. 1912, v. 388, 389, 393, 394.

Semmler, and others: Further contributions on the constituents of volatile oils.—Ber. deutsch. chem. Gesellsch. 1912, v. 45.

Henderson, and others: A number of contributions to the chemistry of the terpenes.—J. Chem. Soc. Lond. 1912, v. 101.

Pickard and Littlebury: The alcohols of the hydroaromatic and terpene series. Part II. The menthols corresponding with optically inactive menthone.—J. Chem. Soc. Lond. 1912, v. 101, p. 109–127.

Luftensteiner: A review of contribution by Schimmel & Co. on the chemistry of volatile oils.—Pharm. Post, 1912, v. 45, p. 701–704.

Tilden, Perkin and Umney: A series of postgraduate lectures on essential oils.—Brit. & Col. Drug. 1912, v. 61, p. 385, 454, 498, 517, 557; see also Pharm. J. 1912, v. 88, p. 581, 651, 723, 756.

Rippetoe and Wise: The preservative action of essential oils, with tabulated summaries of the results of an extensive investigation.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1273–1282.

Schimmel & Co.: Brief abstract of paper by R. Geinitz on comparative experiments on the narcotic and disinfectant action of the most frequently used essential oils and of their active constituents.—Semi-Annual Report, 1912, October, p. 134.

OLEUM ADIPIS.

Pearson, W. A.: One sample was found which had an iodine value of 81.67.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 176.

OLEUM AMYGDALÆ AMARÆ.

Schimmel & Co.: Bitter almond oil assumes a yellowish color with age.—Semi-Annual Report, 1912, April, p. 138.

Jensen, H. R.: Fifteen samples of almond oil free from prussic acid gave a specific gravity of 1.043 to 1.0546; refractive index, 1.54 to 1.545.—Evans' An. Notes, No. 7, 1912, p. 6.

Dodge, Francis D.: The assay of benzaldehyde and oil of bitter almonds, with a comparison of results by the different methods. Criticism of the U. S. P. method.—Eighth Internat. Cong. Appl. Chem. v. 17, p. 15–20; see also Chem. & Drug. 1912, v. 81, p. 513, and Pharm. Post, 1912, v. 45, p. 914.

Schimmel & Co.: Adulteration with synthetic oil still remains a matter of daily occurrence. In bitter almond oil free from hydrocyanic acid, in particular, artificial oil is used to a truly incredible extent by certain firms.—Semi-Annual Report, 1912, October, p. 22.

Taylor, F. O.: Traces of chlorine were found in 17 out of the 22 samples of essential oil of almonds, indicating that the oil is merely a synthetic benzaldehyde.—Am. Perf. 1912–1913, v. 7, p. 41; see also p. 78.

de Myttenaere, Ferd.: The determination of oil in cherry laurel water, the action of hydrocyanic acid on the aldehydes and the ketones. A new process for determining aldehydes.—Ann. Pharm. Louvain, 1912, v. 18, p. 1–4.

OLEUM AMYGDALÆ EXPRESSUM.

Mann, E. W.: Nine samples of genuine expressed oil of almonds gave: specific gravity, 0.9175 to 0.9200, iodine absorbed 98.40 to 99.51 per cent, refractive index 1.4702 to 1.4714.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 5.

Brown, Linwood A.: Sixteen samples analyzed; two adulterated with peach kernel oil.—Proc. Kentucky Pharm. Assoc. 1912, p. 50.

Becker, M.: One sample did not conform to U. S. P. specifications in several respects, and was considered as containing apricot kernel oil.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 175.

Rep. Local Govt. Bd. 1910–1911: Of 12 samples of almond oil examined, 1 was found to be adulterated or not up to standard.—Brit. & Col. Drug. 1912, v. 61, p. 62.

Anon.: A simple process for the detection of adulteration. Summary of findings (Boll. chim. farm. 1912, p. 41).—Ann. chim. analyt. 1912, v. 17, p. 277.

OLEUM ANISI.

Needham, R. H.: Why should oil made from star anise be excluded, while it contains the same constituents as the oil made from anise seed?—J. Am. Pharm. Assoc. 1912, v. 1, p. 1347.

Brown, J. A.: In the dry distillation combustion process, anise seed and bay require a deduction to be made from the percentage of oil found, to allow for a slight amount of destructive distillation.—Analyst, 1912, v. 37, p. 88.

Schimmel & Co.: Tabulated statements of the characters of anise oils, both before and after rectification by steam, and of the distillation residues.—Semi-Annual Report, 1912, April, p. 120.

North, Horace: The present standard congealing point is fair, provided the oil is supercooled at 10° . It appears to be necessary to raise the present upper limit of gravity to 0.990.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 11.

Gane, E. H.: One lot of Manila oil of anise proved of excellent quality.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Jensen, H. R.: Report on 21 samples, normal and apparently adulterated or of doubtful purity.—Evans' An. Notes, No. 7, 1912, p. 7.

Gehe & Co.: Unusually high prices for star anise due to the marked reduction in the supply of this drug, owing to the troubles in China, are reported.—Handelsbericht, 1912, p. 66-67.

Mann, E. W.: Five samples of oil of star anise were examined, and in most cases a temperature of 25° was necessary to effect a clear solution in three volumes of alcohol (90 per cent). Some of the samples were slightly dextrorotatory.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 25.

Parry, Ernest J.: A well-known brand of star anise seed in original leads has been found to be adulterated, the label covering the patched part of the container.—Chem. & Drug. 1912, v. 81, p. 53; see also p. 372.

Raubenheimer, Otto: Comment on the great need of a uniform body, in place of the variable oil of anise now on the market.—J. Am. Pharm. Assoc. 1912, v. 1, p. 337-342.

Beringer, George M.: An examination of some commercial samples of anethol, with tabulated results of analysis.—J. Am. Pharm. Assoc. 1912, v. 1, p. 342.

Howard, Chas. D.: Of 23 samples of spirit of anise examined, 6 were not conformable.—Rep. New Hampshire Bd. Health, 1912, p. 171.

OLEUM AURANTII CORTICIS.

North, Horace: It is recommended that the test for pinene be deleted. Nine samples gave a specific gravity at 25° ranging between 0.8431 and 0.8463, and an optical rotation between $+86.0^{\circ}$ and $+96.28^{\circ}$, respectively.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 63.

Schimmel & Co.: In bitter orange oil the specific gravity ranges from 0.852 to 0.857; in sweet orange oil, from 0.848 to 0.853.—Semi-Annual Report, 1912, April, p. 139.

Hervey, Clifford R.: The addition of essential oil of orange to ether in the production of general anaesthesia, as suggested by Gwath-

mev, promises to vindicate the contentions of its originator.—New York M. J. 1912, v. 96, p. 949.

OLEUM BERGAMOTTÆ.

Swain, Robert Lee: Bergamot is named from Bergamo, in Italy.—Drug. Circ. 1912, v. 56, p. 63.

Mann, E. W.: Two of the five samples of oil of bergamot were considered to be doubtful.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 25.

OLEUM BETULÆ.

Noyes, C. Reinold: It is impossible to distinguish oil of sweet birch, oil of wintergreen, and methyl salicylate. There is considerable sentiment in favor of including these three products in the next Pharmacopœia under one head.—Proc. South Dakota Pharm. Assoc. 1912, p. 43.

North, Horace: The oil may have a deep red color due to the presence of iron. Such lots should be rejected or else washed free from iron and preserved thereafter in glass containers. Specific gravity, carefully determined, ranged from 1.1819 to 1.1811.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 87.

OLEUM CADINUM.

North, Horace: This is one of the ill-defined articles of the Pharmacopœia. What appears commonly in the markets as oil of cade is completely soluble in alcohol. It resembles tar oil.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 18.

Anon.: On account of the difficulty of obtaining an official oil of cade birch tar has been substituted in large part for it.—N. A. R. D. Notes, 1912–1913, v. 15, p. 427.

OLEUM CAJUPUTI.

Schimmel & Co.: The shipments of cajuput oil for 1909 is reported as 1,309 baskets; 1910, 1,536 baskets; 1911, 1,862 baskets.—Semi-Annual Report, 1912, April, p. 31.

Pearson, W. A.: Traces of copper were found in both samples examined and one sample had an optical rotation of 3.21° .—Proc. Pennsylvania Pharm. Assoc. 1912, p. 174.

Patch, E. L.: Lots meeting other U. S. P. requirements are low in specific gravity, running 0.911 or under instead of 0.915 to 0.925.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Mann, E. W.: One of the six samples examined was unsatisfactory and yielded practically no cineol by the phosphate method.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 26.

OLEUM CARI.

Mann, E. W.: Three samples of foreign distilled oil of caraway gave fairly uniform and satisfactory results.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 27.

North, Horace: Two samples gave specific gravity at 25° of 0.9091 and 0.9030; optical rotation, +72.0° and +78.6°, respectively.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 21.

OLEUM CARYOPHYLLI.

North, Horace: The present standards are satisfactory except that a slight change in the lower limit for specific gravity is recommended.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 23.

Johnson & Johnson: The specific gravity of clove oil varied from 1.04 to 1.045.—Lab. Notes, 1912, p. 25.

Schimmel & Co.: A form of adulteration never before observed was exhibited in a specimen of clove oil, which had a specific gravity at 15° of 1.0509.—Semi-Annual Report, 1912, October, p. 48.

Jensen, H. R.: Two samples of clove oil had unusually high rotation: specific gravity, 1.054, 1.058; optical rotation, –2.10°, –2°.—Evans' An. Notes, No. 7, 1912, p. 23.

Dunn, Milton: A formula for "aqua caryophylli," to be used as a vehicle.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 296–297.

Blaxall, Frank R.: Oil of cloves in a glycerinated emulsion of calf lymph acts very rapidly on the extraneous germs.—Rep. Local Govt. Bd. Lond. 1911–1912, p. 365.

OLEUM CHENOPODII.

Holm, Theo.: *Chenopodium anthelminticum* L. and *C. ambrosioides* L. Description, with 15 figures drawn from nature.—Merck's Rep. 1912, v. 21, p. 178–181.

Henkel, Alice: Brief note on the cultivation of wormseed in Maryland.—Drug. Circ. 1912, v. 56, p. 131.

Schimmel & Co.: The area under cultivation of American wormseed amounted to about 90 acres in 1910, 170 in 1911, 225 in 1912.—Semi-Annual Report, 1912, October, p. 113.

J. D. Riedel, A.-G.: The ash content of chenopodium herb was found to vary from 16.4 to 20.7 per cent.—Riedel's Berichte, 1912, p. 51.

Mann, E. W.: Two samples of oil of American wormseed gave the following results: Specific gravity, 0.9755, 0.9765; rotation, -6.45° , -5.32° ; refractive index, 1.4770, 1.4781.—Ann. Rep. Southall Bros. & Barelay, 1912, 1913, p. 36.

Schimmel & Co.: The minimum limit set by the B. P. C. is too low.—Semi-Annual Report, 1912, April, p. 141.

Schimmel & Co.: Tabulated comparisons, by H. Brüning, of the action of American wormseed oil and eucalyptol.—Semi-Annual Report, 1912, October, p. 120.

OLEUM CINNAMOMI.

Schimmel & Co.: Notwithstanding all pains taken to procure cassia oil which answers to the lead test of the B. P. C., it is found impossible to do so.—Semi-Annual Report, 1912, April, p. 138.

Patch, E. L.: Lots sold as redistilled gave 11 per cent residue, and lots marked lead free, not redistilled, only 11.5 per cent residue.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Johnson & Johnson: The specific gravity of oil of cassia varied from 1.05 to 1.06.—Lab. Notes, 1912, p. 25.

Jensen, H. R.: Seven samples of cassia oil gave a specific gravity of from 1.0607 to 1.0695; optical rotation, $+2.25^{\circ}$ to 4.40° ; refractive index, 1.601 to 1.6069.—Evans' An. Notes, No. 7, 1912, p. 18.

Swinton, Ralph S.: The U. S. P. test for cassia oil is inaccurate. It is inserted for the purpose of detecting admixture of rosin and petroleum, but apparently heedless of the fact that oxygenated constituents of cassia oil (cinnamic acid) will also give this reaction.—Am. Perf. 1912-13, v. 7, p. 203.

Editorial: To stand up for a test like Schimmel's, which admittedly passes an oil with 10-15 per cent of added petroleum, is pampering the ignorant and trading on the credulity of the less scientific section of buyers and sellers.—Brit. & Col. Drug. 1912, v. 61, p. 296.

Editorial: Oil of cinnamon has long been recognized as a germicide.—Meyer Bros. Drug. 1912, v. 33, p. 67.

OLEUM CINNAMOMI ZEYLONICUM.

Anon.: Cassia oil and cinnamon oil are not alike. The names should not be used interchangeably. Oil of cinnamon is distilled from scrap bark, whereas oil of cassia is distilled almost entirely from the leaves (Am. Drug.).—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Schimmel & Co.: A sample of Ceylon cinnamon oil showed a specific gravity of 1.023 at 15° and an optical rotation of 0.11° . These abnormalities were obviously caused by an addition of cassia oil, a much cheaper article.—Semi-Annual Report, 1912, October, p. 38.

Umney, John C.: Tabulated statement of the wide variations in aldehyde during the years 1890 to 1897.—*Brit. & Col. Drug.* 1912, v. 61, p. 330.

Schimmel & Co.: The specific gravity of normal Ceylon cinnamon oil ranges from 1.023 to 1.040. Normal oil contains from 65 to 75 per cent cinnamic aldehyde.—*Semi-Annual Report*, 1912, April, p. 138.

OLEUM COPAIBÆ.

Deussen and Eger: Contribution on the constituents and the behavior of oil of copaiba.—*Chem. Ztg.* 1912, v. 36, p. 561-562.

OLEUM CORIANDRI.

Schimmel & Co.: Pure coriander oil with an optical rotation lower than $+8^\circ$ has never been observed.—*Semi-Annual Report*, 1912, April, p. 139.

OLEUM CUBEBÆ.

North, Horace: Of 11 samples tested, 6 were U. S. P. The specific gravities at 25° varied between 0.9025 and 0.9187, optical rotation from -33.51° to -19.25° .—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 31.

Jensen, H. R.: Of the 12 samples reported on one was doubtful and a second was derived from an abnormal drug.—*Evans' An. Notes*, No. 7, 1912, p. 29.

OLEUM ERIGERONTIS.

Kremers, Edward: In erigeron we have a plant that is yielding an oil which contains 90 per cent or more of limonene, which serves as a good diluent of the finest varnishes on the market.—*Proc. N. W. D. A.* 1912, p. 193.

OLEUM EUCALYPTI.

Bernegau and E'Ve: Outline of a method for the assay of cineol. The indefinite quantity of phosphoric acid in the U. S. P. method is apt to produce trouble for the novice.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 125.

Brown, J. A.: In the case of 3 oils from different sources, the carbon values obtained by the dry distillation combustion process were lower than would be expected on theoretical grounds.—*Analyst*, 1912, v. 37, p. 88.

Parry, E. J.: The method of J. A. Brown is criticized on account of the large variations which occur in the constituents of many essential oils.—*Analyst*, 1912, v. 37, p. 89.

Challet, E.: A study of oil of eucalyptus globulus, with a table showing the constants of a pure oil and of several products used as adulterants. Also table of the constants of the several samples examined.—Bull. Soc. pharm. Bordeaux, 1912, v. 52, p. 213–219, 306–313.

Brownscombe, W. J.: A plea for the adoption of a uniform standard for eucalyptus oil through the Commonwealth.—Chem. & Drug. Australas, 1912, v. 27, p. 396.

Schimmel & Co.: Baker and Smith describe the new distillates from half a dozen species of eucalyptus.—Semi-Annual Report, 1912, October, p. 63.

Jensen, H. R.: Thirty-four samples of Ph. Brit. best quality oil had: specific gravity, 0.9177 to 0.9273; optical rotation, $+0.10^{\circ}$ to $+3.40^{\circ}$; refractive index, 1.4601 to 1.4619; cineol per cent, 77 to 91.—Evans' An. Notes, No. 7, 1912, p. 34.

Bernegau, L. H.: One sample labeled "70 per cent" assayed only 54 per cent cineol.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 176.

Gane, E. H.: One sample of oil of eucalyptus offered contained only 40 per cent of eucalyptol.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Diekman, George C.: In three samples of oil of eucalyptus examined the cineol content varied from 39 per cent to 50 per cent.—Proc. New York Pharm. Assoc. 1912, p. 130.

Noyes, C. Reinold: The cheap oil of eucalyptus is distilled from *Eucalyptus amygdalina*. It contains phellandrene, prohibited by the U. S. P., and only a small percentage of eucalyptol which is the constituent of principal value.—Proc. South Dakota Pharm. Assoc. 1912, p. 42.

Naumann, W.: Amygdalina eucalyptus oil, which, it has been suggested, is more valuable for medicinal purposes than the globulus and high testing cineol percentage oils, is coming more into the market with a consequent lowering of the price.—Brit. & Col. Drug. 1912, v. 61, p. 144.

Editorial Note: Eucalyptus oil distillers are selling all the lower grades of oil to smelters.—Pharm. J. 1912, v. 88, p. 479.

Connolly, D. I.: The inunction treatment of measles. A report based on 160 consecutive cases of measles treated by inunction with oil of eucalyptus.—Practitioner, 1912, v. 89, p. 664–689.

Anon.: A 9-months-old child died as the result of being given a small quantity of eucalyptus oil mixed with camphorated oil in mistake for cod liver oil.—Pharm. J. 1912, v. 88, p. 44.

OLEUM FOENICULI.

Richter, R.: The Ph. Germ. V directs that oil of fennel have an optical rotation of $+12^{\circ}$ to $+24^{\circ}$.—Pharm. Zentralh. 1912, v. 53, p. 868-869.

Schimmel & Co.: The maximum limit in specific gravity was given more correctly in the 1907 edition of the B. P. C. as 0.980.—Semi-Annual Report, 1912, April, p. 139.

North, Horace: The anethol may be frozen out of fennel oil and the residual oil will still meet the official requirements, except in respect to congealing point.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 33-36.

Dodge and Olcott: The requirement of $+5^{\circ}$ congealing point is generally agreed to be too severe.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Patch, E. L.: Eight samples of oil of fennel examined had congealing points varying between $+6.5^{\circ}$ and $+2.85^{\circ}$. One sample required cooling to -16° .—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

Gehe & Co.: Fenchone is being produced at a comparatively low price and is used extensively for technical purposes, because of its solvent properties on resins, rubbers, oils, and nitrocellulose.—Handelsbericht, 1912, p. 134.

OLEUM GAULTHERIÆ.

Swain, Robert Lee: *Gaultheria procumbens* is named in honor of Gaulther, of Quebec, and at the same time the name indicates that the plant is a creeper; that is to say, one with procumbent proclivities.—Drug. Circ. 1912, v. 56, p. 63.

Schimmel & Co.: From 3.3 kilos of the leaves and stalks of *G. punctata* Bl. (*G. fragrantissima* Wall.), there were obtained at Buitenzorg 23 cc. of oil with a density at 26° of 1.175; optical rotation, $+0^{\circ}$.—Semi-Annual Report, 1912, April, p. 132.

Johnson & Johnson: Specific gravity varied from 1.175 to 1.18.—Lab. Notes, 1912, p. 28.

Pearson, W. A.: One lot was rejected on account of the probable addition of synthetic methyl salicylate.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 175.

Diekman, George C.: Quotes Harvey W. Wiley to the effect that there is very little pure oil of gaultheria on the market.—Proc. New York Pharm. Assoc. 1912, p. 134.

Byrnes, Garret: Is it not time to come out into the open, inform our physicians, and even our lay patrons, that we can furnish a genuine oil of birch, but that we are doubtful of our ability to supply genuine oil of wintergreen?—Proc. New Jersey Pharm. Assoc. 1912, p. 89.

Packard, C. H.: The only safe way is to buy a guaranteed oil and pay accordingly; but if you sell oil you buy as birch, label it as birch.—*Proc. Massachusetts Pharm. Assoc.* 1912, p. 100.

Editorial: As a cure for certain existing conditions, it is suggested that the trade establish and abide by a custom to sell oil of gaultheria only in original packages sealed by the distiller.—*Drug. Circ.* 1912, v. 56, p. 332.

Stanislaus, I. V. S.: Since oil of wintergreen and oil of birch are identical, the Pharmacopœia should admit only oil of birch, since its use is much more common.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 391.

For a symposium on oil of gaultheria, "guaranteed U. S. P.", by various contributors, see *Drug. Circ.* 1912, v. 56, p. 271-275.

Howard, Chas. D.: Of 14 samples of extract of wintergreen examined, 7 were not conformable.—*Rep. New Hampshire Bd. Health*, 1912, p. 170.

Burnett, J. A.: The hypodermic use of oil of wintergreen deserves a thorough trial.—*Phys. Drug News*, 1912, v. 7, p. 116-117.

OLEUM GOSSYPII SEMINIS.

Cook, Alfred N.: Cotton seed oil must not be sold for sweet oil. Only olive oil may be sold as sweet oil.—*Bull. No. 33, South Dakota F. & D. Dept.* 1912, p. 2; see also U. S. Food Inspection Decision 139.

Washington, Horace Lee: Imports of cotton seed oil into Liverpool from the United States amounted to 6,936 tons of refined and 17 tons of unrefined in 1910, and 8,784 tons of refined and 2,899 tons unrefined in 1911.—*Cons. & Tr. Rep.* June 20, 1912, p. 1225.

Ravndal, G. Bie: Cottonseed and corn oil from the United States have recently been widely substituted for olive oil in the making of soap in Turkey. In 1909 the imports of cottonseed oil from the United States amounted to 20,000 barrels; in 1910, 36,000 barrels; and in 1911, about 50,000.—*Cons. & Tr. Rep.* July 3, 1912, p. 39, 43.

Evans, Edward: The United States exports cottonseed oil, not for purposes of adulteration, as many imagine, but to be used for edible purposes by the Italians, being cheaper than their own products.—*Pharm. J.* 1912, v. 89, p. 167; see also *Year-Book of Pharmacy*, 1912, p. 396.

Editorial: Brief review of the new records for cottonseed oil.—*Oil, Paint and Drug Rep.* 1912, v. 81, April 15, p. 9.

Smalley, F. N.: The determination of total fatty acids in cottonseed foots.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 11, p. 27-35; for discussion see Vol. 28, p. 91. See also *J. Ind. & Eng. Chem.* 1912, v. 4, p. 893-895.

Mann, E. W.: The extremely low proportion of free fatty acid in cottonseed oil is noteworthy and indicates the thoroughness with

which the oil is refined.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 11.

Pearson, W. A.: One sample had a saponification number of 188, and an iodine number of 109.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 174.

Stallings, R. E.: A sample of cottonseed oil analyzed was misbranded.—Bull. Georgia Dept. Agric. No. 56, [1912] p. 155.

Gastaldi, E.: An improved form of the Halphen reaction is outlined (J. Farm. Chim. 1912, v. 61, p. 289).—Pharm. J. 1912, v. 89, p. 553; see also J. Soc. Chem. Ind. 1912, v. 31, p. 934.

Chisholm, J. C.: U. S. Patent 1,010,017, November 28, 1911, covers a process of refining crude cottonseed oil.—J. Soc. Chem. Ind. 1912, v. 31, p. 33.

Editor, "Queries and Minor Notes": There is no evidence which proves that properly purified cottonseed oil acts differently from other edible oils, either on the skin or internally.—J. Am. M. Assoc. 1912, v. 59, p. 960.

OLEUM HEDEOMÆ.

Harris, T. C.: Brief description of the making of oil of sassafras and oil of pennyroyal in the primitive establishments of North Carolina.—Pract. Drug. 1912, v. 30, December, p. 43.

North, Horace: Samples answering in every respect the requirements of the U. S. P. VIII are only occasionally received.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 68.

Pearson, W. A.: Six samples examined varied from 0.9195 to 0.9242 in specific gravity at 25°, from +24° 58' to +30° 14' in optical rotation at 25°, and were soluble in from 0.7 and 0.8 parts of 70 per cent alcohol.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 175.

Schimmel & Co.: Recently an oil described as false pennyroyal oil, which reminds one strongly of rosemary oil, has repeatedly been offered from the Southern States, U. S. A.—Semi-Annual Report, 1912, April, p. 99.

OLEUM JUNIPERI.

Richter, R.: The Ph. Germ. V describes oil of juniper as colorless or pale yellowish or greenish. The specific gravity is given as from 0.860 to 0.880.—Pharm. Zentralh. 1912, v. 53, p. 893.

North, Horace: Of 6 samples of juniper berry oil examined the specific gravity at 25° varied between 0.8557 and 0.8661, and the optical rotation between -22.37° and +2.21°.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 52.

Schimmel & Co.: Commercial oils of good quality have been found to possess a specific gravity of 0.860.—Semi-Annual Report, 1912, April, p. 139.

Mann, E. W.: A marked distinction of character is evidenced between genuine distillates of juniper and sophisticated oils known as juniper wood oil.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 29.

OLEUM LAVENDULÆ FLORUM.

Mitlacher, Wilhelm: Observations on the cultivation of *Lavendula spica* L.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 409.

Richter, R.: The Ph. Germ. V gives the optical rotation of oil of lavender at 20° as from -3° to -9° . The specific gravity has been somewhat extended and is now from 0.822 to 0.895.—Pharm. Zentralh. 1912, v. 53, p. 893-895.

North, Horace: The present pharmacopœial requirements are decidedly inadequate. They are criticized in detail.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 54.

Schimmel & Co.: A description of the distillation of lavender oil, with tabulated results of analysis of 8 samples.—Semi-Annual Report, 1912, October, p. 70-76.

Delphin, T.: Two new adulterants for oil of lavender.—Svensk farm. Tidskr. 1912, v. 16, p. 69-73.

Jeancard and Satie: A great number of essences appraised according to their ether content, as lavender and bergamot, are adulterated by the addition of diverse ethers.—Am. Perf. 1911-1912, v. 6, p. 203.

Johnson & Johnson: The specific gravity of oil of lavender varied from 0.890 to 0.900.—Lab. Notes, 1912, p. 25.

Roure-Bertrand Fils: Good qualities of oil of lavender are now unprocurable.—Sc. & Ind. Bull. 1912, Series 3, No. 5, p. 40, 94.

Schimmel & Co.: In the case of steam distilled oils, as much as over 50 per cent ester content (linalyl acetate) is observed.—Semi-Annual Report, 1912, April, p. 139.

Roure-Bertrand Fils: Comment upon the great fluctuations in oil of lavender during the past eight years and the causes thereof.—Sc. & Ind. Bull. 1912, Series 3, No. 6, p. 84.

Mann, E. W.: Two samples of genuine English oil of lavender gave: Specific gravity, 0.883, 0.8945; esters as linalyl acetate, 7.88, 9.59 per cent; refractive index, 1.4655, 1.4700. One sample of adulterated foreign oil probably contained rosemary oil.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 30.

Haycock, J.: Suggested standard for concentrated compound tincture of lavender, 4 per cent total solids.—Year-Book of Pharmacy, 1912, p. 539.

OLEUM LIMONIS.

Roure-Bertrand Fils: The market statistics of Messina show the following shipments of oil of lemon to the United States: 1909, 73,106 kilos; 1910, 129,473 kilos; 1911, 195,983 kilos.—*Sc. & Ind. Bull.* 1912, Series 3, No. 6, p. 91.

Brooks, R. O.: The Chace test for pinene in lemon oil is recommended for adoption, despite Parry's criticism.—*Am. Perf.* 1911-1912, v. 6, p. 202.

North, Horace: Thirteen samples of lemon oil examined gave a specific gravity at 25° varying between 0.8509 and 0.8538, and an optical rotation of the oil between +45.38° and +60.44°.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 56.

Mann, E. W.: Twelve samples of oil of lemon assayed for citral by Bennett's hydroxylamine method varied between 2.9 and 3.5 per cent.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 32.

Umney and Parry: The method of Walther, as modified by Bennett, for the determination of citral gives the most accurate results possible.—*Chem. & Drug.* 1912, v. 81, p. 446.

Schimmel & Co.: Outline of Kleber's method for the determination of the citral content of lemon oil, and of comments by Chace, Hiltner, and others.—*Semi-Annual Report*, 1912, April, p. 75; see also Brooks, R. O., *Am. Perf.* 1911-1912, v. 6, p. 202.

Brooks, R. O.: Like all other aldehydes, citral is far from stable, and is not a reliable index for extracts.—*Am. Perf.* 1912-1913, v. 7, p. 113.

Schimmel & Co.: It is impossible to lay down definite limits of value for terpene free oils, as their properties vary according to the process of manufacture.—*Semi-Annual Report*, 1912, April, p. 139.

OLEUM LINI.

Havenhill, L. D.: If the U. S. P. standards are to serve commercial purposes they should be elaborated.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 861.

Richter, R.: The Ph. Germ. V now expressly designates cold pressed linseed oil that must be light yellow in color, clear, and quite limpid. The degree at which it must still remain liquid has been reduced from -20° to -16°.—*Pharm. Zentrallh.* 1912, v. 53, p. 894.

Gane, E. H.: Linseed oil is commonly extended with corn oil. Soya bean oil has been used, but to a much less extent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 501.

Strode, Sylvanus E.: The sale of adulterated linseed oil is evidently on the decline, as the proportion of pure samples to those that are adulterated is increasing.—*Ann. Rep. Ohio D. & F. Com.* 1911, 1912, p. 27.

Sheppard, E. J.: Pure linseed oil. A report of an investigation to determine the influence of impurities present in the seed on the character of the oil.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 14–16.

Olsen and Ratner: The decomposition of linseed oil during drying.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 12, p. 165–173.

Olsen and Ratner: The decomposition of linseed oil during drying; with several tables and a chart showing progressive oxidation of linseed oil.—*Tr. Am. Inst. Chem. Eng.* 1912, 1913, v. 5, p. 100–107.

Liverseege and Elsdon: The Livache and other tests for linseed oil and its adulterants.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 207.

Ladd, E. F.: Dealers are warned against handling an adulterated linseed oil, that is being offered for sale in North Dakota.—*Bull. Agric. Exper. Sta. North Dakota*, v. 2, p. 49.

Kellogg, James W.: The result of analyses of samples, by the Pennsylvania bureau of chemistry, during the past year, has shown that the adulteration of linseed oil had increased considerably over that of previous years.—*Oil, Paint and Drug. Rep.* 1912, v. 82, Dec. 9, p. 11.

Table showing some of the analytical results reported for linseed oil

Reporter.	Number of samples.		References.
	Examined.	Rejected.	
Barnard, H. E.....	11	5	Rep. Indiana Bd. Health, 1911, 1912, p. 267.
Brown, Linwood A.....	14	6	Proc. Kentucky Pharm. Assoc. 1912, p. 50.
Cook, Alfred N.....	116	22	Rep. South Dakota F. & D. Com. 1912, p. 81–84.
Diekman, George C.....	4	1	Proc. New York Pharm. Assoc. 1912, p. 130.
Rep. Local Govt. Bd. 1910–11.	16	1	Brit. & Col. Drug. 1912, v. 61, p. 62.
Havenhill, L. D.....	23	13	Proc. Kansas Pharm. Assoc. 1912, p. 60.
Johnson & Johnson.....	10	2	Lab. Notes, 1912, p. 26.
Klueter, Harry.....	106	58	Rep. Wisconsin D. & F. Com. 1912, p. 60.
Ladd, E. F.....	2	2	Bull. Agric. Exper. Sta. North Dakota, v. 2, p. 101.
Sayre, L. E.....	11	4	Bull. Kansas Bd. Health, 1912, v. 8, Nos. 7–12, p. 153.
Stallings, R. E.....	2	2	Bull. Georgia Dept. Agric. No. 56 [1912], p. 155–156.
Tilford, J. Floyd.....	52	22	Rep. Kansas Bd. Health, 1912, p. 113.

OLEUM MENTHÆ PIPERITÆ.

Mossler, Gustav: The influence of variations in cultivation on the volatile oil content of *Mentha piperita*, with a table showing the influence of various fertilizers on the nature and composition of the oil.—*Pharm. Post*, 1912, v. 45, p. 2–5.

Richter, R.: The Ph. Germ. V, in addition to oil of *M. piperita* Linné, also recognizes oil of closely related varieties of mint.—*Pharm. Zentrallh.* 1912, v. 53, p. 896.

Schimmel & Co.: The total production of American peppermint oil in 1911 is estimated at 240,000 lbs.—*Semi-Annual Report*, 1912, April, p. 100; see also October, p. 89.

Patch, E. L.: Samples labeled "Twice rectified," "U. S. P.," and "Redistilled" were not always colorless.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

Dück: An unrectified sample of oil of peppermint did not give a clear solution with alcohol.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 515.

North, Horace: Eleven samples of natural American peppermint oils gave the following ranges: specific gravity (at 25°) 0.8987 to 0.9018; optical rotation, -28.43° to -23.59° .—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 70.

Johnson & Johnson: Specific gravity was found to be from 0.890 to 0.900. Rotation, -24° to -25° .—*Lab. Notes*, 1912, p. 27.

Parry, Ernest J.: A sample of peppermint oil for analysis was found to contain 60 per cent of petroleum.—*Chem. & Drug.* 1912, v. 81, p. 53.

Crowe, E. F.: Japanese peppermint is remarkable for the large proportion of menthol crystals it contains. The dementholized peppermint oil of Japan is disagreeable in taste and odor and can not compare with that of other countries.—*Brit. & Col. Drug.* 1912, v. 62, p. 448; see also *Pharm. J.* 1912, v. 89, p. 541.

Mann, E. W.: The increased price of menthol has evidently brought about increased dementholization of Japanese oil of peppermint.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 33.

OLEUM MENTHÆ VIRIDIS.

Schimmel & Co.: The total area under spearmint cultivation in Michigan and Indiana amounts to 2,057 acres, as compared with 1,520 acres in 1911.—*Semi-Annual Report*, 1912, October, p. 103.

Nelson, E. K.: A chemical investigation of American spearmint oil, to determine the chemical and physical constants of a pure sample of the oil.—*Circ. Bur. Chem. U. S. Dept. Agric.* 1912, No. 92, p. 4; see also *Pharm. Era*, 1912, v. 45, p. 309-310.

Schimmel & Co.: According to K. Irik, Hungarian spearmint oil constitutes a straw-colored or faintly greenish-yellow liquid; specific gravity at 15° compared with water at 4°, 0.9375 to 0.9513; optical rotation, 44.38° to 49.85° .—*Semi-Annual Report*, 1912, April, p. 118.

OLEUM MORRHUÆ.

Editorial: The production of cod liver oil in 1912 has been 76,000 barrels, against 43,000 barrels in 1911.—*Pharm. J.* 1912, v. 89, p. 43; see also v. 88, p. 566.

French, Harry B.: The production of cod liver oil this year has been enormous.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 836.

Gehe & Co.: A table, giving the supplies of cod liver oil for the years 1907-1911, is presented.—Handelsbericht, 1912, p. 84-85.

Apple, Franklin M.: Stock bottles for cod liver oil, which have to be filled and refilled, should be abolished and the oil bottled in thoroughly cleansed and perfectly dry containers holding not over one pint.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1254.

E'We, Geo. E.: Eighteen samples examined, iodine number varied from 133.6 to 153; twelve were above 185 in saponification number; eleven were above 0.922 in specific gravity.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 170.

Jensen, H. R.: Thirty-one samples of genuine refined, nonfreezing grades fell between: specific gravity, 0.9258 to 0.927; refractive index, 1.4801 to 1.4912.—Evans' An. Notes, No. 7, 1912, p. 24.

Richter, Ernst: Directions for making an emulsion of cod liver oil.—Apoth.-Ztg. 1912, v. 27, p. 139.

Richter, O.: Emulsions of cod liver oil, with a number of formulas.—Apoth.-Ztg. 1912, v. 27, p. 213-214.

Maignon, F.: The rôle of fats in the utilization of alimentary albumin.—Compt. rend. Soc. Biol. 1912, v. 72, p. 1054-1056.

Osborne, Oliver T.: While cod liver oil is, perhaps, one of the most easily digestible of oils, it is, nevertheless, so likely to cause indigestion that its value has been greatly overestimated.—J. Am. M. Assoc. 1912, v. 59, p. 1161.

Czerny, Ad: Contribution to the therapy of cod liver oil. It has been shown that the ingestion of fats impedes, while a carbohydrate diet furthers the development of tuberculosis.—Therap. Gegenw. 1912, v. 53, p. 49-50.

Williams, Owen T.: Of the oils on the market, the forms which are prepared under conditions which prevent oxidation have the greater amount of unsaturated fatty acid compounds.—Pharm. J. 1912, v. 89, p. 806-809; for discussion, see p. 757.

Herb, Joseph: Animal fats are more digestible than vegetable, and cod liver oil is the most assimilable form of fatty food.—Proc. California Pharm. Assoc. 1912, p. 74-79.

Williams, Owen T.: Clinical evidence shows that cod liver oil has beneficial effects in phthisis.—Brit. M. J. 1912, v. 2, p. 700-702.

OLEUM MYRISTICÆ.

Richter, R.: Under the same designation the Ph. Germ. V recognizes both oil of mace and oil of nutmeg. The optical rotation at 20° is given as +7° to +30°.—Pharm. Zentrallh. 1912, v. 53, p. 895.

Schimmel & Co.: Oils prepared from the best material have given an optical rotation as low as +7.52°.—Semi-Annual Report, 1912, April, p. 139.

North, Horace: The deletion of the standard optical rotation, among the changes made after the appearance of the first edition of the Pharmacopœia, must be regarded as a mistake and should be rectified in the next revision.—Rep. Lehn. & Fink's Analyt. Dept. 1910-1912, 1913, p. 61.

Johnson & Johnson: Shipment accepted, specific gravity from 0.880 to 0.885.—Lab. Notes, 1912, p. 26.

OLEUM OLIVÆ.

Reber, Elenora E.: Olives and olive oil, with illustrations showing method of picking olives and crusher and presser in an olive oil factory.—Am. Food J. 1912, v. 7, August, p. 12-14.

Gaulin, A.: The total olive crop in France in 1910 was 77,084 metric tons, as compared with 48,582 tons in 1909 and 125,212 tons in 1908.—Cons. & Tr. Rep. April 26, 1912, p. 359.

Winans, Charles S.: The Director General of Agriculture at Madrid estimates the olive oil production in all Spain for 1911 at 693,383,460 pounds, as compared with 238,719,360 pounds in 1910.—Cons. & Tr. Rep. January 16, 1912, p. 268.

Kroeber, Ludwig: The Ph. Germ. V requirements for olive oil and for peanut oil.—Apoth.-Ztg. 1912, v. 27, p. 278-279.

Food Inspection Decision 139, declares that the only oil to which the term "sweet oil" may correctly be applied is olive oil.

Editorial Note: It is lawful in America to sell cottonseed oil or similar bland vegetable oils as "salad oil." In the north of England and in Scotland it is generally understood that "sweet oil" is synonymous with rapeseed oil.—Pharm. J. 1912, v. 88, p. 412.

Evans, Edward: Olive oil is looked upon as being the most valuable in the pharmacopœia. None other can really take its place with benefit.—Pharm. J. 1912, v. 89, p. 167; see also Year-Book of Pharmacy, 1912, p. 396.

Becker, M.: Samples were found during the past year which had acid numbers varying from 27.7 to 40.1.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 175.

Rippetoe and Smith: Fourteen of the 47 samples of olive oil examined were below the U. S. P. iodine number limit of 80. This limit is considered too high, and an oil of the best quality may be condemned if held to this requirement.—Am. J. Pharm. 1912, v. 84, p. 158-159.

Bernegau and E'Ve: None of the samples of olive oil tested during the last few years responded properly to the elaidin test, and rarely gave a "whitish granular mass" in the freezing test. It is suggested that a thorough investigation of these tests be made.—J. Am. Pharm. Assoc. 1912, v. 1, p. 126.

North, Horace: The Pharmacopœia should set a limit to acidity. Salad oils have acid values ranging from 3 to 5. An equal quality should be dispensed by the druggist for medicinal use.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 62.

Adler, Ludwig: The detection of peanut oil in olive oil, by means of Mansfeld's modification of the Bellier test.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 23, p. 676–679; see also Lüers, Heinrich, v. 24, p. 683–684.

J. D. Riedel, A.-G.: Five parts of oil will not dissolve in a mixture 10 cc. of chloroform and 20 cc. of alcohol as prescribed by the Ph. Germ. V.—Riedel's Berichte, 1912, p. 40; see also Südd. Apoth.-Ztg. 1912, v. 52, p. 183.

Table showing some of the analytical results reported for olive oil.

Reporters.	Number of samples.		References.
	Exam-ined.	Re-jected.	
Barnard, H. E.....	25	8	Rep. Indiana Bd. Health, 1911, 1912, p. 248.
Brown, Linwood A.....	53	1	Proc. Kentucky Pharm. Assoc., 1912, p. 50.
Caspari, Chas., jr.....	3	0	Rep. F. & D. Com. Maryland, 1912, Baltimore, 1913, p. 15.
De Barr, Edwin.....	4	3	Rep. Oklahoma P. H. Dept., 1912, p. 477.
Rep. Local Govt. Bd. 1910–11.	434	18	Brit. & Col. Drug., 1912, v. 61, p. 62.
Howard, Chas. D.....	24	3	Rep. New Hampshire Bd. Health, 1912, p. 170.
Klueter, Harry.....	36	1	Rep. Wisconsin D. & F. Com., 1912, p. 61.
McGill, A.....	152	13	Exper. Sta. Rec., 1912, v. 26, p. 564.
Mann, E. W.....	99	6	Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 16.
Potter, Hubert F.....	8	1	Rep. Connecticut D. & F. Com., 1912, p. 34.
Stallings, R. E.....	46	1	Bull. Georgia Dept. Agric. No. 56 [1912], p. 140.
Stallings, R. E.....	18	13	Bull. Georgia Dept. Agric. No. 56 [1912], p. 137.
Tilford, J. Floyd.....	10	1	Rep. Kansas Bd. Health, 1912, p. 112.

Freeman, Alpheus: The use of fats in disorders of the stomach.—Am. Med. 1912, v. 18, p. 104–108.

Ferguson, Robert H.: The efficacy of the olive oil treatment of postanæsthetic vomiting is questioned.—N. York M. J. 1912, v. 95, p. 1359.

OLEUM PICIS LIQUIDÆ.

North, Horace: Diligent search has failed to bring to light oleum picis liquidæ U. S. P. with the required specific gravity of "about 0.892 at 25°."—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 88.

OLEUM PIMENTÆ.

North, Horace: Adulteration with clove oil, especially if practised in moderation, is difficult to prove.—Rep. Lehn & Fink's Analyt. Dept. 1910–1912, 1913, p. 74.

Schimmel & Co.: A minimum specific gravity of 1.024 has been observed and a eugenol content up to 80 per cent. The estimation

must be carried out with 3 per cent solution, as otherwise the results are too high.—Semi-Annual Report, 1912, April, p. 140.

OIL OF PINE NEEDLE.

Anon.: The name *Pinus sylvestris* is more misused than any other and there is practically no oil of *P. sylvestris* on the market. The name is generally applied to such oils as the Siberian and Austrian oils (Am. Drug.).—J. Am. Pharm. Assoc. 1912, v. 1, p. 502.

McEwan, Donald: Oleum pini sylvestris, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

OLEUM RICINI.

Harris, W.: The castor oil plant and its cultivation.—Bull. Dept. Agric. Jamaica, 1912, v. 2, No. 5, p. 50–55.

Adlung: The home of the castor oil plant is Africa, though at the present time castor oil used in Europe comes chiefly from Italy and France.—Apoth.-Ztg. 1912, v. 27, p. 157.

Anon.: The imports into the United States during 1910 of castor beans or seeds amounted to 744,807 bushels; in 1911, 790,241 bushels.—Cons. & Tr. Rep. May 13, 1912.

Llewellyn, J. F.: Brief historical sketch of castor oil and a castor oil bottle.—Proc. Missouri Pharm. Assoc. 1912, p. 99.

Richter, R.: The Ph. Germ. V requires that expressed castor oil should be washed by boiling with water to remove the ricin.—Pharm. Zentralh. 1912, v. 53, p. 898.

Johnson & Johnson: The specific gravity of castor oil varied from 0.95 to 0.96.—Lab. Notes, 1912, p. 25.

Mann, E. W.: Twenty samples of castor oil of varying grades gave: specific gravity, 0.9625 to 0.9650; saponification value, 179.1 to 183.0; refractive index, 1.4780 to 1.4796.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 9.

Hommell, P. E.: The suggested formula for an aromatic or tasteless castor oil is very desirable.—Proc. New Jersey Pharm. Assoc. 1912, p. 93.

Caldwell, Paul: In the formula for aromatic castor oil, the saccharin should be mixed with one-third its weight of sodium bicarbonate, and the two dissolved in a portion of the castor oil by the aid of heat.—Drug. Circ. 1912, v. 56, p. 70; see also Roemer, p. 247.

Holland, F. W. Crossley: The suitability of various commercial proteins for pharmaceutical use. Castor oil bean protein.—Pharm. J. 1912, v. 89, p. 154; for discussion see p. 175.

OLEUM ROSÆ.

Siedler, P.: The cultivation of the rose and the production of oil of rose in Bulgaria.—Ber. pharm. Gesellsch. 1912, v. 22, p. 476-494; see also Pharm. Ztg. 1912, v. 57, p. 997-998.

Schimmel & Co.: The total product of Bulgarian rose oil is estimated at 2,987 kilos, as compared with 3,950 for 1911.—Semi-Annual Report, 1912, October, p. 95; see also Roure-Bertrand Fils, Sc. & Ind. Bull. 1912, Series 3, No. 6, p. 94.

Richter, R.: The Ph. Germ. V directs that oil of rose be made from fresh petals of different varieties of rose. The optical rotation at 20° is given as -1° to -3° .—Pharm. Zentrallh. 1912, v. 53, p. 899.

Schimmel & Co.: The minimum specific gravity given by the B. P. C. is too high; it should be 0.849. Oils of good quality have been found with an optical rotation down to -1° . The coefficient of refraction of good Bulgarian oils is frequently lower, sometimes as low as 1.452.—Semi-Annual Report, 1912, April, p. 140.

North, Horace: The properties of 1 sample were: specific gravity at 25°, 0.8618; "congealing point," according to the official method, 19.5°; saponification value, 18.5; the paraffins separated from the 70 per cent alcoholic solution.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 78.

French, Harry B.: The demand for oil of rose is said to be growing and the article is especially susceptible to adulteration.—J. Am. Pharm. Assoc. 1912, v. 1, p. 835.

Schimmel & Co.: Characters and analytical data with reference to several specimens of adulterated rose oil.—Semi-Annual Report, 1912, April, p. 108; see also October, p. 97.

OLEUM ROSMARINI.

North, Horace: The standards for the optical rotation are decidedly at variance with the properties of pure oils of unexceptionable quality.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 76-78.

Richter, R.: The Ph. Germ. V has extended the specific gravity of oil of rosemary to read from 0.900 to 0.920. This, it is said, will exclude the Spanish variety of this oil.—Pharm. Zentrallh. 1912, v. 53, p. 899.

OLEUM SABINÆ.

North, Horace: Three lots were tested; 1 was wholly fictitious; the other 2 had a specific gravity of 0.9084 and 0.9244 and an optical rotation of $+57.59^{\circ}$ and $+44.23^{\circ}$, respectively.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 83.

Agnew and Croad: Method used to obtain pure sabinene, with a description of the various fractions obtained from a pure specimen of oil of savin.—*Analyst*, 1912, v. 37, p. 295-298.

OLEUM SANTALI.

Needham, R. II.: It is just as important that *santalum album*, which is the source of the oil of santal, should be made official as that castor and croton beans retain their respective places.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1347.

North, Horace: The requirement for optical rotation should be somewhat relaxed. The main reliance should be placed on the santalol content.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 79.

Mann, E. W.: Only one of the six samples submitted to examination proved to be soluble in six volumes of alcohol (70 per cent) at 15.5°. With the remainder, temperatures up to 30° were necessary to effect a clear solution.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 35.

Richter, R.: The Ph. Germ. V now permits oil of santal to be made from the wood of the root, as well as the wood of the stem. The optical rotation at 20° is given as -16° to -20°.—*Pharm. Zentralh.* 1912, v. 53, p. 899-901.

Pohl, Julius: On the experimental valuation of santal preparations.—*Therap. Monatsh.* 1912, v. 26, p. 874-877.

Editorial: Review of 3 methods used in estimating the amount of volatile oil in sandalwood, by Puran Singh, with tabulated statement of results.—*Chem. & Drug.* 1912, v. 80, p. 544.

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Osborne, Oliver T.: As a stimulant to the genitourinary tract, the oil of santal is as satisfactory as anything yet discovered.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

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Patch, E. L.: Five samples of oil of sassafras varied in specific gravity from 1.0574 to 1.075, and optical rotation from $+2.30^{\circ}$ to $+3.3^{\circ}$.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

North, Horace: Fourteen samples of U. S. P. oils gave the following ranges: Specific gravity at 25° , 1.0649 to 1.0752; optical rotation, $+2.11^{\circ}$ to $+3.28^{\circ}$.—*Rep. Lehn & Fink's Analyt. Dept.* 1910–1912, 1913, p. 80–83.

Johnson & Johnson: Specific gravity varied from 1.06 to 1.075.—*Lab. Notes*, 1912, p. 27.

OIL OF SESAME.

Adlung: The sesame plant is probably indigenous to India, but is now cultivated in nearly all tropical and subtropical countries.—*Apoth.-Ztg.* 1912, v. 27, p. 147.

Richter, R.: The Ph. Germ. V requires that oil of sesame be light yellow in color, nearly odorless, and have a specific gravity of from 0.921 to 0.924. The index of refraction varies from 1.4652 to 1.4659 at 40° . The melting point of the fatty acid is 26° and the congealing point 22.3° .—*Pharm. Zentralh.* 1912, v. 53, p. 901–903.

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Kaluza, Ludwig: A new method for the production of mustard oils.—*Monatsh. Chem.* 1912, v. 33, p. 363–371.

North, Horace: Nine samples of volatile oil of mustard gave specific gravities ranging between 1.0099 and 1.0146. It is recommended that the present lower limit be changed to 1.010.—*Rep. Lehn & Fink's Analyt. Dept.* 1910–1912, 1913, p. 61.

Richter, R.: The Ph. Germ. V recognizes only the synthetic product.—*Pharm. Zentralh.* 1912, v. 53, p. 927.

Smith, F. A. Upsher: Thiosinamin, a substance obtained by the action of ammonia and alcohol on volatile oil of mustard, has secured a position in the newer materia medica.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 842.

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Anon.: The United States exported 13,263,902 gallons of spirit of turpentine during the eight months ending August 31, 1912, as com-

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Anon.: A note on the oil obtained from the turpentine collected by the "cup-and-gutter" system.—Am. J. Pharm. 1912, v. 84, p. 317-327.

Havenhill, L. D.: The tests for the presence of rosin spirit needs strengthening and a test for coal-tar oils would be welcomed.—J. Am. Pharm. Assoc. 1912, v. 1, p. 861.

Bernegau and E'Ve: The U. S. P. test for "absence of petroleum benzin, kerosene, or similar hydrocarbons" in oil of turpentine should have a time limit upon it.—J. Am. Pharm. Assoc. 1912, v. 1, p. 126.

Peters, R.: The physical and chemical properties of genuine and of adulterated turpentine.—Pharm. Zentralh. 1912, v. 53, p. 331-334.

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Piest, C.: The determination of pine wood oil in oil of turpentine.—Chem. Ztg. 1912, v. 36, p. 198; also Apoth.-Ztg. 1912, v. 27, p. 158.

Baumann, K.: Detection of pine wood oil in oil of turpentine.—Pharm. Ztg. 1912, v. 57, p. 575-576.

Marcusson, J.: The determination of benzin and of benzol in oil of turpentine.—Chem. Ztg. 1912, v. 36, p. 413-414, 421-422.

Beuclair-Lafaye, Ch.: A simple method for the detection of adulteration in oil of turpentine.—Bull. Soc. pharm. Bordeaux, 1912, v. 52, p. 390-397.

Delfour, H.: A new apparatus for the simple and rapid examination of oil of turpentine.—Bull. Soc. pharm. Bordeaux, 1912, v. 52, p. 255-261.

Pearson, W. A.: The quality of this commodity has greatly improved during the past year but many samples are not colorless as the pharmacopœia demands.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 174.

Strode, Sylvanus E.: Samples recently analyzed indicate that manufacturers and jobbers are still selling adulterated oil of turpentine in violation of the law.—Ann. Rep. Ohio D. & F. Com. 1911, 1912, p. 27.

Parry, Ernest J.: Adulteration of American turpentine undoubtedly exists to a very large extent at present. Tests are discussed with tabulated summaries of analytical results.—Chem. & Drug. 1912, v. 81, p. 340.

Ladd, E. F.: Turpentine substitutes are now coming on the market labeled and sold as turpentine, in direct violation of the law.—Bull. Agric. Exper. Sta. North Dakota, v. 2, p. 49.

North, Horace: The gravity of pure American oils never falls below 0.860 at 25°.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 93.

Mann, E. W.: The optical rotation of different samples of American oil of turpentine varied from -1.23° to $+11.76^{\circ}$, the refractive index from 1.4707 to 1.4731, and the specific gravity from 0.8675 to 0.8710.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 35.

Richter, R.: The Ph. Germ. V gives the optical rotation of oil of turpentine at 20° as $+15^{\circ}$ to -40° .—Pharm. Zentralh. 1912, v. 53, p. 928.

Table showing some of the analytical results reported for oil of turpentine.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Barnard, H. E.....	4	1	Rep. Indiana Bd. Health, 1911, 1912, p. 273.
Brown, Linwood A.....	13	4	Proc. Kentucky Pharm. Assoc. 1912, p. 52.
Ford, Chas. M.....	2	2	Bull. Colorado Bd. Health, 1911, v. 11, December, p. 5.
Rep. Local Govt. Bd. 1910-11.	27	3	Brit. & Col. Drug., 1912, v. 61, p. 62.
Potter, Hubert F.....	394	38	Rep. Connecticut D. & F. Com., 1912, p. 35.
Stallings, R. E.....	42	35	Bull. Georgia Agric. No. 56 [1912], p. 149.
Street, John Phillips.....	130	39	Rep. Connecticut Agric. Exper. Sta., 1912, p. 208.
Strode, Sylvanus E.....	27	10	Rep. Ohio D. & F. Com., 1912, 1913, p. 80.

Noyes, C. Reinold: Only the redistilled oil should be used for internal purposes. While the ordinary oil may be labeled U. S. P. and used for medicinal purposes externally, it can not be sold for internal use.—Proc. South Dakota Pharm. Assoc. 912, p. 42.

For additional references see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr. and Chem. Zentralbl.

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Richter, R.: The Ph. Germ. V now states that cacao butter is obtained from the roasted seed of *Theobroma cacao* Linné.—Pharm. Zentralh. 1912, v. 53, p. 863.

van Riel, jr., and van der Wielen: The melting point of a mixture of oil of theobroma and yellow wax is gradually reduced by the addition of wax up to 3.4 per cent. Further addition of wax increases the melting point so that a mixture of oil of theobroma with 4 per cent of yellow wax has practically the same melting point as the oil of theobroma itself. The variation is graphically illustrated by a chart.—Pharm. Weekblad, 1912, v. 49, p. 566-568.

Mann, E. W.: Six samples of cacao butter gave the following figures: Iodine absorbed 36.13 to 40.44 per cent; saponification value, 192.0 to 195.1 per cent.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 10.

Becker, M.: Samples of a substitute for cocoa butter labeled hard palm kernel fat with cocoa flavor were found to have a melting point varying from 31.5° to 39.5°.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 170-171.

Jensen, H. R.: Four genuine highly refined samples gave: Acid value, 1.1 to 2.8; saponification value, 193 to 199; iodine value, 35.1 to 36.5; melting point, 32° to 34°.—Evans's An. Notes, No. 7, 1912, p. 24.

Düick: Two samples of oil of cacao were found to melt at 26°.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 515.

Duyk, Maurice: Cacao butter is very frequently adulterated with other fats, the fraudulent additions being chiefly butter of cocoa nut, and less frequently green butter, the butter of Dika and of Illipé, wax, spermaceti, margarine, and paraffin.—Ann. chim. anal. 1912, v. 17, p. 405-407; see also J. pharm. Anvers, 1912, v. 68, p. 641-646.

Richter, Otto: On the rapid determination of the fat content of cacao by means of the Zeiss refractometer.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 24, p. 312-319.

OLEUM THYMI.

Richter, R.: The Ph. Germ. V does not indicate the optical rotation of oil of thyme. This is recognized as being subject to considerable variation.—Pharm. Zentralh. 1912, v. 53, p. 929.

Kleber, Clemens: Criticism of the U. S. P. method for the determination of the phenol percentage of thyme oils.—Am. Perf. 1912-1913, v. 7, p. 183.

Diekman, George C.: Six samples of oil of thyme were found to vary from 16 per cent to 23 per cent of phenols.—Proc. New York Pharm. Assoc. 1912, p. 129.

North, Horace: The official requirement as to color should read: a pale yellow to red liquid. A gravity below 0.900 must be regarded as evidence of adulteration with oil of turpentine.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 91.

Patch, E. L.: Oil of red thyme flowers, guaranteed to be genuine, gave specific gravity 0.888, optical rotation -1.2° , phenols 22.5 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 502.

Patch, E. L.: It has been stated that no genuine oil of origanum is obtainable and oil of red thyme is offered instead.—J. Am. Pharm. Assoc. 1912, v. 1, p. 501.

OLEUM TIGLII.

North, Horace: The statements in the Pharmacopœia relative to the solubility of croton oil in alcohol are open to question. The present lower limit of gravity appears to be set too high. Two samples of commercial croton oil examined gave specific gravity of 0.9318 and 0.9326.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 31.

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Mitlacher, Wilhelm: Observations of the cultivation of *Papaver rhoeas* and of *P. somniferum*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 431.

Perrot, Em.: Brief note on the culture of the poppy and the marketing of opium.—Bull. Sc. pharmacol. 1912, v. 19, p. 722-726.

Wood, H. Truman: In 1796 John Ball, of Williton, sent to the Royal Society of Arts some samples of home-grown opium.—Chem. & Drug. 1912, v. 81, p. 166.

Mitlacher and Hoyer: A report of experimental studies on opium and its production.—Pharm. Post, 1912, v. 45, p. 993-996, 1005-1007.

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McKesson, Irving: Tabulated statement of the opium crops from 1900 to 1912, with imports into the United States for these three years of gum opium testing over 9 per cent morphine.—Proc. N. W. D. A. 1912, p. 172.

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Ravndal, G. Bie: The opium exports from Turkey in 1911 amounted to about 3,500 cases, or $\frac{1}{3}$ of the 1910 shipments.—Cons. & Tr. Rep. July 3, 1912, p. 39.

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Tunmann, O.: Only a comparatively small proportion of the opium used in Germany is imported at Hamburg.—Apoth.-Ztg. 1912, v. 27, p. 71.

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La Wall, Chas. H.: The fact that milk sugar precipitates in varying degrees under varying conditions of temperature, introduces a disturbing factor in opium assays.—J. Am. Pharm. Assoc. 1912, v. 1, p. 411.

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Vanderkleed, Chas. E.: The assays of 8 samples of gum opium varied from 12.000 to 13.039 per cent of morphine. *Proc. Pennsylvania Pharm. Assoc.* 1912, p. 180.

Tilford, J. Floyd: Of 6 samples of opium examined, all were illegal.—*Rep. Kansas Bd. Health*, 1912, p. 113.

Mann, E. W.: Three samples of opium assayed from 13.50 to 16.88 per cent morphine, calculated on the dry opium. The moisture content varied from 25.0 to 27.5 per cent.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 17.

van Itallie, E. I.: The water content of 9 samples of opium was found to vary from 9.10 to 22.08 per cent.—*Pharm. Weekblad*, 1912, v. 49, p. 330–331.

Dietrich, K.: A report of the analyses of 3 samples of Formosa opium, which was found to contain from 64.14 to 63.56 per cent of water soluble material, and from 5.27 to 7.55 per cent of morphine.—*Pharm. Zentralh.* 1912, v. 53, p. 114.

French, Harry B.: A sample of opium sold as 22 per cent, assayed an average of 20.2 per cent by the U. S. P. method.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 833–836.

Brown, Linwood A.: One sample of granulated opium analyzed 98.6 per cent, 3 samples of gum opium gave 126.7, 127.5, 140 per cent U. S. P. strength.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 50.

Debourdeaux: Powdered opium and its preservation. A note on the apparent deterioration of opium due to the combination or possible decomposition of the soluble morphine.—*J. pharm. et chim.* 1912, v. 6, p. 491–493.

Wiebelitz, H.: Opium and pulverized opium of the Ph. Germ. V. Opium dried at 60° is markedly hygroscopic, and the resulting powder, when diluted according to the Ph. Germ. V, unless carefully protected from atmospheric moisture, will not assay the required amount of morphine.—*Apoth.-Ztg.* 1912, v. 27, p. 894–895.

Dickman, George C.: In 4 samples of powdered opium examined, the morphine content varied from 11.845 to 12.560.—*Proc. New York Pharm. Assoc.* 1912, p. 130.

Vanderkleed, Chas. E.: The assays of 11 samples of powdered opium varied from 12.076 to 12.630 per cent of morphine; all above standard.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 180.

Needham, R. H.: Deodorized opium has no right to a place in the *Pharmacopœia*.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1346.

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Spindler: Reports 2 samples of extract of opium assaying 19.1 and 20 per cent of morphine, respectively.—Südd. Apoth.-Ztg. 1912, v. 52, p. 11.

Anon.: Four samples of extract of opium were found to contain from 14.4 to 21.96 per cent of morphine, 2 samples being below the Ph. Germ. V requirement of 20 per cent.—Südd. Apoth.-Ztg. 1912, v. 53, p. 52.

Caesar & Loretz: Renewed attention is called to the need for standardizing the completed preparations of opium. Of 8 samples of powdered opium purchased as containing 10 per cent, only 4 met these requirements. Of 7 samples purchased as containing not less than 12 per cent of morphine, only 3 exceeded this amount.—Jahres-Ber. 1912, p. 67-72.

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Table showing some of the analytical results reported for camphorated tincture of opium.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Anon.....	31	6	Pharm. J. 1912, v. 89, p. 810.
Jaffa, M. E.....	12	9	Proc. California Pharm. Assoc. 1912, p. 85.
Do.....	8	7	Proc. California Pharm. Assoc. 1912, p. 86.
Street, John Phillips.....	39	7	Rep. Connecticut Agric. Exper. Sta. 1912, p. 208.
Strode, Sylvanus E.....	1	1	Ann. Rep. Ohio D. & F. Com. 1911, 1912, p. 66.

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Korndörfer, A.: Tincture of opium containing 1 per cent of morphine can not readily be made from powdered opium containing only 10 per cent of morphine.—Apoth.-Ztg. 1912, v. 27, p. 764-765.

White, William R.: A new method of making tincture of opium.—J. Am. Pharm. Assoc. 1912, v. 1, p. 46.

Emery, J. Q.: The laudanum examined was deficient in morphine.—Rep. Wisconsin D. & F. Com. 1912, p. 25.

Table showing some of the analytical results reported for tincture of opium.

Reporters.	Number of samples.		References.
	Examined.	Re-jected.	
Barnard, H. E.....	8	6	Rep. Indiana Bd. Health, 1911, 1912, p. 275.
Brown, Linwood A.....	65	25	Proc. Kentucky Pharm. Assoc. 1912, p. 52.
Caspari, Chas., jr.....	128	75	Rep. F. & D. Com. Maryland, 1911, Baltimore, 1913, p. 15.
Cook, Alfred N.....	1	1	Rep. South Dakota F. & D. Com. 1912, p. 50.
Cox, C. B.....	25	3	Proc. Washington Pharm. Assoc. 1912, p. 61.
Fitz-Randolph, R. B.....	7	3	Rep. New Jersey Bd. Health, 1911, 1912, p. 226.
Marcelet, H.....	1	1	Bull. Pharm. Sud-Est, 1912, v. 17, p. 532.
Sayre, L. E.....	5	5	Bull. Kansas Bd. Health, 1912, v. 8, Nos. 7-12, p. 150.
Do.....	3	1	Bull. Kansas Bd. Health, 1912, v. 8, p. 106.
Strode, Sylvanus E.....	8	4	Ann. Rep. Ohio D. & F. Com. 1911, 1912, p. 66.
Do.....	1	1	Rep. Ohio D. & F. Com. 1912, 1913, p. 78.

Debourdeaux: Sydenham's laudanum; the method of making it and its possible deterioration.—*J. pharm. et chim.* 1912, v. 6, p. 544-551.

De Jonge, Cornelius: The suggested formula for tincture of opium with saffron was not workable, because the sand and drug mass packed so closely that percolation was prevented.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 272; see also *Drug. Circ.* 1912, v. 56, p. 157.

Caldwell, Paul: There are enough official tinctures of opium to last for some time. The only novelty connected with the preparation is that it is intended for the National Formulary rather than the Pharmacopœia.—*Drug. Circ.* 1912, v. 56, p. 70; see also Roemer, John, p. 248.

Watkyn-Thomas, F. W.: A comparative study of the action of the opium alkaloids.—*Biochem. J. Liverpool*, 1912, v. 6, p. 433-444.

Barth, Otto: Contribution to the action of the opium alkaloids.—*Arch. exper. Path. u. Pharmacol.* 1912, v. 70, p. 258-292.

Cartier, François: The leading feature of opium is its depression of the cerebral functions, indicated by great drowsiness and stupor.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 244.

The Registrar-General reports for England and Wales in 1910 46 accidental deaths and 41 suicides from opium, morphine, and laudanum.—*Pharm. J.* 1912, v. 89, p. 96.

Stanislaus and Wood: *Combretum sundaicum* Miquel; analytical data, with report of a case in which it was used for the treatment of the opium habit.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 34-38.

Smith, F. A. Upsher: Combretum, the plant so much vaunted a few years ago for the treatment of the opium habit, appears to have lost favor.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 841.

Editorial: The conditions of the Indian opium traffic are briefly outlined.—*Pharm. J.* 1912, v. 89, p. 3.

Straub: The pharmacology of opium smoking.—Pharm. Post, 1912, v. 45, p. 503.

Adams and Doran: Some data on the manufacture of smoking opium and its chemical composition.—J. Ind. & Eng. Chem. 1912, v. 4, p. 429-431.

Editorial: Opium taking in the Far East. Summaries of the conclusions of Caddy, Neill and Richards.—Med. Rec. 1912, v. 81, p. 763.

Washington Correspondent: Text of letters forwarded to Congress by President Taft with reference to the opium question.—Oil, Paint and Drug. Rep. 1912, v. 81, June 10, Pt. 1, p. 34.

Editorial: Brief review of The Hague Opium Convention.—Chem. & Drug. 1912, v. 80, p. 190; see p. 193-195 for full text of Convention, and Xrayser II, p. 223; also v. 81, p. 854.

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Finger, H. J.: Report, as representative to The Hague Opium Conference, which includes some data on the enormous extent of the opium traffic.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1075.

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Gutbier, A.: A review of progress in the chemistry of oxygen.—Chem. Ztg. 1912, v. 36, p. 53.

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Fischler and Bardach: A study of phosphorus poisoning in dogs with Eck's fistula.—Ztschr. physiol. Chem. 1912, v. 78, p. 435–463.

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Adlung: Physostigma is indigenous to the west coast of Africa from Cape Palmas to Kamerun. The chief market is Lagos.—Apoth. Ztg. 1912, v. 27, p. 137.

Swain, Robert Lee: *Physostigma venenosum*, indicates that the drug is "venomous" or of deadly nature.—Drug. Circ. 1912, v. 56, p. 64.

Vanderkleed, Chas. E.: The assays of 5 samples of calabar bean varied from 0.092 to 0.214 per cent of physostigmine; 4 above and 1 below standard.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Dohme and Engelhardt: This drug assayed during the last two years 0.15 per cent of ether soluble alkaloids, while in the years previous beans with as high as 0.31 per cent could easily be bought.—J. Am. Pharm. Assoc. 1912, v. 1, p. 100.

Scoville, Wilbur L.: Five assays of physostigma during the past 6 to 10 years gave between 0.11 to 0.78 per cent. The extract should contain 2.0 per cent and the tincture should contain 0.02 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1341.

Stewart, F. E.: Five samples of calabar bean assayed showed a variation of 61 to 143 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1452.

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Mindes, J.: Crystals of physostigmine salicylate, in a mixture of 1 cc. each of water and ammonia water, on heating develop an orange-yellow color; on cooling and the addition of 1 cc. of acetic acid, this becomes carmine-red.—*Siidd. Apoth. Ztg.* 1912, v. 52, p. 93.

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Crance, A. J.: The old-fashioned “poke and whisky” of the rural American appears to be too homely to be ethical, but it has put to shame the best efforts of some of our scientific doctors.—*Am. J. Clin. Méd.* 1912, v. 19, p. 661.

Anon.: Phytolacca for the constipation of the aged, apparently from inadequate muscular action. It is suggestive that the ash of poke berries contains a large percentage of potash.—*J. Am. Inst. Homœop.* 1911–12, v. 4, p. 225.

Hobby, A. W.: Phytolacca is indicated in acute tonsillitis, accompanied by a pallid condition of the tongue and mucous membrane, with involvement of the lymphatics.—*Eclectic M. J.* 1912, v. 72, p. 134.

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Richter, R.: The Ph. Germ. V requires that pilocarpine hydrochloride melt at approximately 200°.—*Pharm. Zentrallh.* 1912, v. 53, p. 981.

Gehe & Co.: The price of pilocarpine is constantly changing, due to the variation in the crude material.—*Handelsbericht*, 1912, p. 148.

Meillère, G.: The detection and determination of pilocarpine in the presence of quinine.—*J. pharm. et chim.* 1912, v. 6, p. 108-109; see also *Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 584.

Hustin, A.: Pilocarpine exerts no direct action on the pancreatic cells. It acts, in the experimental conditions described, through the intermediation of the duodenum.—*Compt. rend. Soc. biol.* 1912, v. 72, p. 538.

Redfield: Specific indications for pilocarpine are: dryness of the tissues or perversion of the secretions, there being a deficiency in quantity.—*Am. J. Clin. Med.* 1912, v. 19, p. 528.

Floris, Giovanni: Report of 4 cases of obstruction of the third stomach and tympanitis in cattle, successfully treated by the subcutaneous injection of pilocarpine and eserine.—*Am. Vet. Rev.* 1911-12, v. 40, p. 669.

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Caesar & Loretz: A sample of jaborandi leaves yielded an ash content of 8.94 per cent.—*Jahres-Ber.* 1912, p. 103.

J. D. Riedel, A.-G.: The ash content of jaborandi was found to vary from 6.3 to 6.5 per cent; amount of insoluble ash to 0.2 per cent.—*Riedel's Berichte*, 1912, p. 51.

Dohme and Engelhardt: The quality of jaborandi leaves has been fairly constant, the alkaloidal percentage being in the neighborhood of 1 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 102.

Scoville, Wilbur L.: Of 13 assays of pilocarpus during the past 6 to 10 years, 6 were below 0.60 per cent, and 5 above 0.75 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1341.

Patch, E. L.: Four samples of jaborandi assayed from 0.165 to 0.3 per cent.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 501.

Caesar & Loretz: An outline of the Keller-Fromme method of assay of jaborandi.—*Jahres-Ber.* 1912, p. 139-140.

Dohme and Engelhardt: Replace the percolation process in the assay method by the aliquot part method. In case emulsions should be formed, use tragacanth for breaking them up.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 603.

Pyman, Frank Lee: Pilosine, a new alkaloid from *Pilocarpus microphyllus*.—*J. Chem. Soc. Lond.* 1912, v. 191, p. 2260-2271.

Léger and Roques: Carpiline, a new alkaloid of jaborandi.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 1088.

Pyman, Frank Lee: The synthesis of glyoxaline derivatives allied to pilocarpine.—*J. Chem. Soc. Lond.* 1912, v. 101, p. 530-544.

Anon.: Where the skin glands are inactive, where the perspiration is scanty but yet offensive, the skin lifeless, the odor of the perspira-

tion persistent, give jaborandi, from 2 to 4 drops every 2 hours (Ellingwood's Therapeutist).—*Am. J. Clin. Med.* 1912, v. 19, p. 933.

Redfield: Jaborine, the companion alkaloid of pilocarpine, while being isomeric with it completely antagonizes its physiological action.—*Am. J. Clin. Med.* 1912, v. 19, p. 527.

Ellingwood, Finley: Sthenic cases of typhoid fever have been greatly abridged by a full dose of jaborandi.—*Am. J. Clin. Med.* 1912, v. 19, p. 487.

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Richter, R.: The Ph. Germ. describes pills as medicinal preparations that are preferably for internal use.—*Pharm. Zentralh.* 1912, v. 53, p. 981.

Phillips, P. B.: Prize essay on pill excipients.—*Pharm. J.* 1912, v. 88, p. 806, 842; see also *Brit. & Col. Drug.* 1912, v. 61, p. 305.

Dauzel, Lucien: Formula for a multiple pill excipient (*Union pharm.* 1911, p. 393).—*Bull. Pharm. Sud-Est*, 1912, v. 17, p. 42.

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Linckersdorff: A number of suggestions on pills and methods of making them.—*Pharm. Ztg.* 1912, v. 57, p. 960.

Havenhill and Steveson: A table showing the average time required in minutes for the disintegration of different commercial coated pills.—*J. Am. Pharm. Assoc.* v. 1, p. 451-453.

Phillips, P. B.: Tabulated results of experiments in regard to the solubility of pills massed with various excipients, with formula for an excipient, "massol," which approaches universality in its applications.—*Chem. & Drug.* 1912, v. 80, p. 516; see also *Pharm. J.* 1912, v. 89, p. 4.

Blair, Henry C.: Gelatin, sugar, and chocolate coated pills can not be made on a commercial basis by the pharmacist. No physician who gives his patient proper advice will order these except in rare instances.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 18.

Puckner, W. A.: A sample of keratin was found to be almost completely (98.73 per cent) soluble in hydrochloric acid pepsin solution, and apparently no satisfactory product is being marketed at the present time.—*J. Am. M. Assoc.* 1912, v. 59, p. 1157.

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Patch, E. L.: Compound cathartic pills and other black pills, labeled gelatin coated, were coated with lampblack and glucose.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

Barnard, H. E.: A sample labeled cathartic pills was found to be morphine tablets.—*Rep. Indiana Bd. Health*, 1911, p. 265.

Blair, Henry C.: No physician who gives his patient proper advice will order ready made gelatin, sugar, or chocolate coated pills except in rare instances where the medicine is extremely disagreeable, or for some other equally good reason.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 18.

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van Urk, H. W.: A comparative examination of the different formulas for Blaud's pills.—*Pharm. Weekblad*, 1912, v. 49, p. 773-778. See also p. 824, 825; and *Apoth. Ztg.* 1912, v. 27, p. 765.

Newton, R. Albro: The addition of a small amount of petrolatum will serve to keep the mass soft a very long time, with the added advantage of retarding the change of the iron from the ferrous state.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1140.

Anon.: A formula with directions for making Lenhartz' modification of Blaud's pills.—*Pharm. Ztg.* 1912, v. 57, p. 980.

Beringer, George M., Jr.: Formula for the preparation of powdered Blaud's mass.—*Am. J. Pharm.* 1912, v. 84, p. 39.

LaWall, Charles H.: Examination of a very old (40 years) sample of Blaud's pills which showed from 1.57 to 1.63 grains each of ferrous carbonate, corresponding to from 3.85 to 3.89 grains of ferrous sulphate in each pill.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 73.

40th Ann. Rep. Local Gov't Bd. 1910-11: Of 18 samples of iron pills examined, 1 was found to be adulterated or not up to standard.—*Brit. & Col. Drug.* 1912, v. 61, p. 62.

PIMENTA.

Rippetoe and Minor: One sample of allspice examined contained 3.64 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 436.

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Figart, D. Milton: The exports of pepper from the Straits Settlements to the United States during the first quarters of each year were as follows: 1911, 163 long tons black, 147 tons white; 1912, 319 long tons black, 346 tons white, and 31 tons long pepper.—*Cons. & Tr. Rep.* June 26, 1912, p. 1339.

Hansen, Carl C.: It is reported that 281,081 pounds of white pepper were invoiced through the American consulate general at Bangkok, Siam, during the fiscal year 1910-11, and 379,704 pounds in 1911-12.—*Cons. & Tr. Rep.* December 17, 1912, p. 1397.

Rusby, H. H.: Black pepper is subject to so many forms of adulteration that its description must be carried out to minute details.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 951.

Troccoli and Verona-Rinati: The adulterants of pepper grains.—*Ztschr. Unters. Nahr. u. Genussm.* 1912, v. 24, p. 737-741.

Dohme and Engelhardt: The percentage of oleoresin should be determined.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 603.

Rippetoe and Minor: Two samples of black pepper contained 4.03 and 4.67 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 442.

Strode, Sylvanus E.: Two samples examined; one not passed.—*Rep. Ohio Dairy & Food Com.* 1912, 1913, p. 80.

De Barr, Edwin: Of 14 samples of pepper examined, 11 were not passed.—*Rep. Oklahoma P. H. Dept.* 1912, p. 449.

Schneider, Albert: More than 50 per cent of the commercial pepper used in the United States is composed of ground olive pits, with enough of the refuse of the original black pepper to give a flavor and the proper color, and capsicum.—*Northwestern Drug.* 1912, v. 13, Oct., p. 20.

Notices of Judgment 1257, 1564, 1568, 1804 deal with the adulteration or misbranding of pepper.

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Beringer, Geo. M.: A proposed N. F. monograph for coal tar obtained as a by-product in the destructive distillation of coal in the manufacture of illuminating gas.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 162.

McDermand, George: The manufacture of coal tar and coal tar products, with a description of the products of distillation obtained at varying temperatures from 110° to 270°.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 114-117.

PLUMBI ACETAS.

Ladd, E. F.: Report on 70 samples of lead acetate, 25 of which were below the U. S. P. standard.—*Bull. Agric. Exper. Sta. North Dakota*, v. 2, p. 140-142.

Maurel, E.: Determination of the minimum mortal, toxic, and therapeutic doses of lead acetate for certain vertebrates; the conger eel, frog, pigeon, and the rabbit.—*Comp. rend. Soc. biol.* 1912, v. 73, p. 506; see also p. 550, 632.

PODOPHYLLUM.

Swain, Robert Lee: *Podophyllum peltatum* shows that May apple has a peltate leaf.—*Drug. Circ.* 1912, v. 56, p. 64.

Dohme and Engelhardt: Podophyllum with less than 4 or 4.5 per cent of resin is frequently met with on the market. An assay process for this drug therefore seems necessary.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 603.

Rippetoe and Minor: Two samples of podophyllum contained 4.2 to 5.10 per cent of ash respectively.—*Am. J. Pharm.* 1912, v. 84, p. 442.

Editorial: Puran Singh states that the Indian drug of average quality contains twice as much active principle (podophyllotoxin) as the American rhizome.—*Chem. & Drug.* 1912, v. 80, p. 728.

Dohme and Engelhardt: The percentage of resin in the fluid extract should be determined.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 601.

POTASSA SULPHURATA.

Howard and Harrison: The official tests for potassa sulphurata are unsatisfactory, and commercial samples examined have been found to vary considerably.—*Pharm. J.* 1912, v. 89, p. 150. For discussion see p. 174 and correction p. 222; see also *Year-Book of Pharmacy*, 1912, p. 475-480, and *Chem. & Drug.* 1912, v. 81, p. 211.

POTASSII ACETAS.

Hopfgärtner, K.: The electrical conductivity of solutions of alkali acetates in acetic acid.—*Monatsh. Chem.* 1912, v. 33, p. 123-139.

Elvove, Elias: Twelve samples of potassium acetate, examined by the author's method, were found to be from 90.90 to 99.83 per cent pure.—*Am. J. Pharm.* 1912, v. 84, p. 293.

POTASSII BICARBONAS.

Brown, Linwood A.: Fourteen samples analyzed; all conformed to U. S. P.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 50.

Jessup Committee: Report on cell stimulation by means of prolonged ingestion of potassium bicarbonate.—*Biochem. J. Liverpool*, 1912, v. 6, p. 169.

POTASSII BITARTRAS.

Fermaud, G.: Ger. Pat. 247,452, July 16, 1911. Process for preparing cream of tartar. *J. Soc. Chem. Ind.* 1912, v. 31, p. 773; see also *J. Ind. & Eng. Chem.* 1912, v. 4, p. 687.

Perigny, J. M.: U. S. Pat. 1,023,528, April 16, 1912. Manufacture of cream of tartar.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 490.

Cornette and Faucheux: Fr. Pat. 435,915, Jan. 9, 1911. Extraction and manufacture of cream of tartar and tartaric acid.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 386. See also p. 1125, first addition, dated Aug. 10, 1911.

Editorial: An arsenic limit for cream of tartar of 1 part per million has been established in Canada by an Order in Council.—*Pharm. J.* 1912, v. 89, p. 804.

North, Horace: A lead test is outlined.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 30.

Jensen, H. R.: One hundred samples of cream of tartar were tested. Of the best grades, 77 per cent had a lead content of 1 to 10 parts per million, the remainder contained 10 to 20 parts, with the exception of one sample which reached 30 parts of lead per million.—Evans' An. Notes, No. 7, 1912, p. 28.

Mann, E. W.: With a single exception, practically 100 per cent strength was recorded for all samples of potassium bitartrate tested.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 40.

Emery, J. Q.: The cream of tartar examined was found to be composed of calcium acid phosphate, calcium sulphate, alum, and starch.—Rep. D. & F. Com. Wisconsin, 1912, p. 25.

Ax, F.: A package of potassium bitartrate was found to contain tartaric acid.—Apoth.-Ztg. 1912, v. 27, p. 149.

Gane, E. H.: Two samples of tartar, offered as strictly U. S. P., tested 96.48 per cent and 98.72 per cent only.—J. Am. Pharm. Assoc. 1912, v. 1, p. 499.

Elvove, Elias: Twelve samples of potassium bitartrate, examined by the author's method, were found to be from 99.10 to 100 per cent pure.—Am. J. Pharm. 1912, v. 84, p. 292.

Brown, Linwood A.: One hundred and three samples analyzed: one contained considerable starch and 10 per cent acid phosphate of calcium; another consisted entirely of salicylic acid.—Proc. Kentucky Pharm. Assoc. 1912, p. 49.

Anon.: Of 216 samples of cream of tartar analyzed under the sale of food and drugs acts during 1911, 6 were found to be adulterated or not up to standard.—Pharm. J. 1912, v. 89, p. 810.

Rep. Local Govt. Bd. 1910-11: Of 259 samples of cream of tartar examined, 5 were found to be adulterated or not up to standard.—Brit. & Col. Drug. 1912, v. 61, p. 62.

POTASSII BROMIDUM.

Brown, Linwood A.: Thirty-one samples analyzed: one found to be a mixture of potassium and sodium bromide.—Proc. Kentucky Pharm. Assoc. 1912, p. 50.

Ellingwood, Finley: A specific comparative study of the bromides.—Ellingwood's Therap., 1912, v. 6, p. 441-443.

POTASSII CARBONAS.

Richter, R.: The Ph. Germ. V requires that potassium carbonate occur as a dry powder insoluble in absolute alcohol.—Pharm. Zentralh. 1912, v. 53, p. 751.

Scoville, W. L.: Potassium carbonate usually contains 8 to 15 per cent of water.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

North, Horace: One sample examined, the details of which are cited, could be considered in no other light than as adulterated with water, since the Pharmacopœia does not recognize any formula other than K_2CO_3 .—*Rep. Lehn & Fink's Analyt. Dept.* 1910–1912, 1913, p. 75.

Ax, F.: A sample of potassium carbonate was found to contain chloride and formic acid.—*Apoth.-Ztg.* 1912, v. 27, p. 149.

Patch, E. L.: Of 3 samples of potassium carbonate, 2 were dirty, contained 0.7 per cent chloride, and made dirty solutions. The third sample was dirty and contained 98.5 per cent K_2CO_3 .—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

Dück: A sample of "pure" potassium carbonate examined contained chloride.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 515.

Schoorl, N.: Examination of potassium carbonate for contaminating alkali, by the use of barium nitrate.—*Pharm. Weekblad*, 1912, v. 49, p. 73–76.

POTASSII CHLORAS.

Wiebelitz: The Ph. Germ. V test for potassium chlorate, with hydrogen sulphide, is objected to because of the liberation of sulphur.—*Pharm. Ztg.* 1912, v. 57, p. 85; see also Pieszczyk, Ernst, p. 105; and Richter, Curt, p. 127, comment on the criticism by Wiebelitz.

Meyer and Stähler: The chloride content of potassium chlorate and the nephelometric control.—*Ztschr. anorg. Chem.* 1912, v. 77, p. 255–256.

Editorial: Recent experiments by Bachem would seem to indicate that the fear as to the toxicity of potassic chlorate has been greatly exaggerated. (*Münch. med. Wehnschr.* October 1).—*Med. Rec.* 1912, v. 82, p. 810.

The Registrar-General reports for England and Wales in 1910, 1 accidental death from potassium chlorate.—*Pharm. J.* 1912, v. 89, p. 96.

POTASSII CITRAS.

Elvove, Elias: An examination of eleven samples of potassium citrate, by the author's method, showed the purity to be from 97.21 to 99.95 per cent.—*Am. J. Pharm.* 1912, v. 84, p. 291.

Brown, Linwood A.: Four samples analyzed; all passed.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 50.

Osborne, Oliver T.: To render the urine alkaline there is nothing better than potassium citrate.—*J. Am. M. Assoc.* 1912, v. 59, p. 1162.

POTASSII CYANIDUM.

Barnard, H. E.: A sample labeled potassium cyanide was found to be potassium ferrocyanide.—Rep. Indiana Bd. Health, 1911, p. 265.

Chio, M.: The blood red color of venous blood in KCN poisoning is due neither to a retardation of organic combustion nor to muscular paralysis, but is caused by dilation of the terminal portions of the arteries; this dilation is coincident with increased heart activity. (Accad. med. Genova, session of Feb. 20, 1911.)—Chem. Abstr. 1912, v. 6, p. 2790.

The Registrar-General reports for England and Wales in 1910 6 accidental deaths and 40 suicides from potassium cyanide.—Pharm. J. 1912, v. 89, p. 96.

POTASSII DICHROMAS.

Tarbouriech, P. J.: The estimation of potassium dichromate in milk.—Bull. Pharm. Sud-Est, 1912, v. 17, p. 241-244.

Editor: Very small doses of potassium bichromate, say 1/64 to 1/128 of a grain, will favorably influence aphonia and hoarseness, due to excessive exercise of the vocal cords or resulting from acute coryza.—Am. J. Clin. Med. 1912, v. 19, p. 234.

The Registrar-General reports for England and Wales in 1910 4 suicides from potassium bichromate.—Pharm. J. 1912, v. 89, p. 96.

POTASSII ET SODII TARTRAS.

Elvove, Elias: Ten samples of potassium sodium tartrate, assayed by the author's method, were found to be from 96.96 to 99.96 per cent pure.—Am. J. Pharm. 1912, v. 84, p. 292.

Brown, Linwood A.: Fifty-five samples examined; all conformed to U. S. P. with a few minor exceptions.—Proc. Kentucky Pharm. Assoc. 1912, p. 51.

De Barr, Edwin: A sample of Rochelle salt was not passed.—Rep. Oklahoma P. H. Dept. 1912, p. 465.

POTASSIUM GLYCEROPHOSPHATE.

Beringer, Geo. M.: A proposed N. F. monograph for potassium glycerophosphate, a semisolid, colorless or yellowish mass, containing about 75 per cent of absolute potassium glycerophosphate.—J. Am. Pharm. Assoc. 1912, v. 1, p. 255.

Bernegau, L. H.: Of four samples examined all were below labeled strength, running from 64.25 to 72.40 per cent.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 172.

POTASSII HYDROXIDUM.

Seoville, W. L.: Potassium hydroxide runs 85 per cent to 89 or 90 per cent strength.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

Richter, R.: The Ph. Germ. V requires but 85 per cent KOH.—*Pharm. Zentralh.* 1912, v. 53, p. 750.

Johnson & Johnson: The KOH content was found to vary from 80 to 88 per cent, the potassium carbonate from 1.5 to 4.0 per cent, with traces only of potassium sulphate.—*Lab. Notes.* 1912, p. 30.

Le Blanc and Weyl: The action of elementary substances on melted alkali hydroxide.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 2300-2315.

Cook, Alfred N.: Potassium hydroxide should be purchased in small packages, as frequent opening of the bottle would cause it to absorb both carbon dioxide and water, and very materially affect its strength.—*Bull. No. 33, South Dakota Food and Drug. Dep.* 1912, p. 2.

POTASSII HYPOPHOSPHIS.

Sieverts and Loessner: The catalytic oxidation of aqueous hypophosphite solutions.—*Ztschr. anorg. Chem.* 1912, v. 76, p. 1-29.

POTASSII IODIDUM.

Marquier, Adolph: Examination of samples of saturated solutions of potassium iodide obtained on prescription showed as low as 25 per cent of KI.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 125.

Fantus, Bernard: In the case of potassium iodide, it would be an advantage to have the Pharmacopœia state the amount by weight in a given volume of a saturated solution.—*Apothecary*, 1912, v. 24, Feb. p. 47.

De Bournonville, A.: The reaction of potassium iodide with mercury cyanide.—*Ann. Pharm. Louvain*, 1912, v. 18, p. 49-55.

Kailan, A.: The influence of penetrating radium rays on potassium iodide in aqueous solution. A contribution on the chemical action of radium.—*Monatsh. Chem.* 1912, v. 33, p. 71-98.

Capps, Joseph A.: The effect of iodides on the circulation and blood vessels in arteriosclerosis.—*Tr. Am. M. Assoc. Sec. Pharm. & Therap.* 1912, p. 258-265; see also *Repr. Therap. Res. Com.* 1912, p. 123-129, and *J. Am. M. Assoc.* 1912, v. 59, p. 1350-1352.

Strauss, Abraham: Potassium or sodium iodide, fed to rabbits in large doses, may lead to an increase of the catalytic activity of the blood.—*Bull. Johns Hopkins Hosp.* 1912, v. 23, p. 51-53.

Hodgkinson, D. F.: Potassium iodide is strongly recommended as an antigalactagogue, in place of belladonna plasters and other treatment. Possible idiosyncrasy and iodism must not be over-

looked (Australian M. Gaz., Sept. 4, 1912).—Chem. & Drug. Australas. 1912, v. 27, p. 391.

Editor. "Queries and Minor Notes": Influence of potassium iodide on the Wassermann reaction.—J. Am. M. Assoc. 1912, v. 59, p. 1309.

POTASSII NITRAS.

Leather and Mukerji: A descriptive article on India saltpeter and its refining, with illustrations and tables. (Z. ges. Schiess-Sprengstoffw., 7, 116-8, 136-40).—Chem. Abstr. 1912, v. 6, p. 1661.

Duisberg, C.: The total consumption of saltpeter during 1910 is estimated as being 2,360,000 metric tons, of which amount 523,000 tons were consumed in the United States and 786,000 tons in Germany.—Ztschr. ang. Chem. 1912, v. 25, p. 6.

Riedel, J. D.: In the Ph. Germ. V requirements, the test for chlorides is apparently complicated by a more sensitive test for chloride under the test for perchlorate; the latter test should be made on the same dilution as that for chloride.—Südd. Apoth.-Ztg. 1912, v. 52, p. 183; see also Riedel's Berichte, 1912, p. 39.

Rep. Local Govt. Bd. 1910-11: Of 12 samples of saltpeter examined, 1 was found to be adulterated or not up to standard.—Brit. & Col. Drug. 1912, v. 61, p. 62.

Anon.: There was a conviction and fine for shipping 10 barrels of potassium nitrate U. S. P. containing 7 per cent sodium chloride (Apothecary).—J. Am. Pharm. Assoc. 1912, v. 1, p. 502.

Anon.: Of 14 samples of saltpeter analyzed under the sale of food and drugs acts during 1911, 2 were found to be adulterated or not up to standard.—Pharm. J. 1912, v. 89, p. 810.

POTASSII PERMANGANAS.

McBride, R. S.: The standardization of potassium permanganate solution by sodium oxalate, with a report of experimental work, and outline of the method of procedure recommended.—J. Am. Chem. Soc. 1912, v. 34, p. 393-416; see also Bull. Bur. Stand. 1912, v. 8, p. 611-650.

Meeker, G. II.: For the standardization of N/10 KMnO_4 the pure sodium oxalate, to be furnished by the U. S. Bureau of Standards, would appear to be the most advantageous standard substance.—J. Am. Pharm. Assoc. 1912, v. 1, p. 27.

Tscheiswili, P. A.: Reduction of neutral potassium permanganate solutions by sulphates.—J. Soc. Chem. Ind. 1912, v. 31, p. 26.

Hartley, Walter Noel: The absorption spectra of permanganates.—J. Chem. Soc. Lond. 1912, v. 101, p. 826-830.

Aeby, Julius: Potassium permanganate, in the presence of organic matter of a combustible nature, may be the origin of a fire.—Eighth Internat. Cong. Appl. Chem. 1912, v. 23, p. 10.

Pendred, B. F.: Recovery in five days from a viper bite treated with seven minims of 1 in 30 potassium permanganate solution, injected at the site of injury.—Brit. M. J. 1912, v. 1, p. 1291.

Anon.: The number of deaths due to snake bite in the Central Provinces of India during 1911 was 1,244. Experiments at the Bombay bacteriological laboratory to test the efficacy of potassium permanganate have proved most discouraging.—Chem. & Drug. 1912, v. 81, p. 75.

Hempel, E.: A solution of potassium permanganate produced severe cauterization in a newborn child. (Klin. Monatsbl. Augenheilk, 12, 758; Zentr. Biochem. Biophys. 12, 697-8.)—Chem. Abstr. 1912, v. 6, p. 2955.

P^RUNUS VIRGINIANA.

Pearson, W. A.: Two lots were rejected because the bark failed to conform to the U. S. P. description.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Rusby, H. H.: A provision for adhering wood should be included in the U. S. P.—J. Am. Pharm. Assoc. 1912, v. 1, p. 952.

Kline, C. Mahlon: The admixture of forbidden old bark, by gatherers of wild cherry bark, is probably deliberate and not the result of ignorance.—Am. J. Pharm. 1912, v. 84, p. 28.

Patch, Edgar L.: Cherry bark yielded 4 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

French, J. Graham: Deterioration of sirup of wild cherry. The last trace of hydrocyanic acid in sirup of wild cherry disappears within three or four months of the time of making.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 292-293.

Utech, P. Henry: Inasmuch as the influence of light exercises a very detrimental influence on the keeping quality and remedial value of this sirup, it is quite advantageous to keep the stock sirup in an amber-colored glass container.—J. Am. Pharm. Assoc. 1912, v. 1, p. 474.

Diekman, George C.: Suggested formula and method of preparation for sirup of wild cherry.—Proc. New York Pharm. Assoc. 1912, p. 116.

PULVIS ANTISEPTICUS N. F.

Anon.: Care should be taken that the mixture of salicylic acid and zinc sulphate be triturated to a very fine powder, as the usefulness of this preparation largely depends upon it, especially when used as a dusting powder.—N. A. R. D. Notes, 1912, v. 14, p. 1538.

PULVIS AROMATICUS.

Havenhill, L. D.: The formula is not clear as to whether 15 gm. of cardamom or 15 gm. of cardamom seeds are required.—J. Am. Pharm. Assoc. 1912, v. 1, p. 861.

PULVIS CRETÆ COMPOSITUS.

Schulze, Louis: A quick and easy method of preparing compound chalk powder is to add to it an amount of oil of cinnamon equivalent to the amount contained in sufficient cinnamon water to form a definite quantity of chalk mixture.—J. Am. Pharm. Assoc. 1912, v. 1, p. 151.

PULVIS EFFERVESCENS COMPOSITUS.

Xrayser II: According to the Oxford English Dictionary, the first quotation for "Seidlitz" is in a reference to the German, dated 1784.—Chem. & Drug. 1912, v. 80, p. 49.

Ford, Charles M.: A sample of Seidlitz powder proved to be one gramme short of weight.—Proc. Nebraska Pharm. Assoc. 1912, p. 105.

Caspari, Chas., jr.: Of 227 samples of Seidlitz powders examined, 134 were not passed.—Rep. Food & Drug Com. Maryland, 1911, Baltimore, 1913, p. 15; see also Bull. Pharm. 1912, v. 26, p. 50.

Anon.: Of 49 samples of Seidlitz powder analyzed under the sale of food and drugs acts during 1911, 1 was found to be adulterated or not up to standard.—Pharm. J. 1912, v. 89, p. 810.

40th Ann. Rep. Local Govt. Bd. 1910-11: Of 74 samples of Seidlitz powder examined, 10 were found to be adulterated or not up to standard.—Brit. & Col. Drug. 1912, v. 61, p. 62.

Brown, Linwood A.: Twenty-four samples examined; the great trouble lay in inaccurate division of the powders, and, in a majority of the cases, short weight. Two cases were found where the blue powder mixture was deficient in Rochelle salt.—Proc. Kentucky Pharm. Assoc. 1912, p. 51.

Havenhill, L. D.: In preparing these powders it is all right to dry the tartaric acid and the sodium bicarbonate, but when it comes to drying the potassium and sodium tartrate, one might question whether drying is synonymous with exsiccation. The question again comes up whether the drying is to be done before or after the weighing.—J. Am. Pharm. Assoc. 1912, v. 1, p. 861.

PULVIS JALAPÆ COMPOSITUS.

McEwan, Donald: Compound powder of jalap, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

PYRETHRUM.

J. D. Riedel, A.-G.: The ash content of pyrethrum was found to vary from 4.7 to 7.5 per cent; amount of insoluble ash to 0.6 per cent.—Riedel's *Berichte*, 1912, p. 52.

Needham, R. H.: There is little or no demand for the root or its preparations; it is not used internally.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1346.

PYROGALLOL.

Glücksman, C.: On the identity reactions of pyrogallie acid.—*Pharm. Praxis*, 1912, v. 11, p. 99–101; see also *Répert. Pharm.* 1912, v. 24, p. 413.

Kennerknecht, K.: Successful results obtained from the treatment of tuberculous osteitis with a 10 per cent pyrogallol salve, or a 5 or even 2 per cent, as conditions may indicate (*Münch. med. Wehnschr.* v. 59, No. 10).—*J. Am. M. Assoc.* 1912, v. 58, p. 1159.

PYROXYLINUM.

Glover, W. H.: As transportation companies refuse to forward pyroxylin, it is suggested that a working formula for this be added to the *Pharmacopœia*.—*J. Am. Pharm. Assoc.* 1912 v. 1, p. 865.

QUASSIA.

Anon.: Brief historical sketch of quassiæ lignum.—*Chem. & Drug.* 1912, v. 80, p. 149.

Richter, R.: The *Ph. Germ.* V now recognizes 2 varieties of quassia.—*Pharm. Zentralh.* 1912, v. 53, p. 766.

Rippetoe and Minor.: Two samples of quassia contained 2.30 and 2.95 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 443.

Patch, Edgar L.: Quassia yielded 4.4 per cent ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1121.

J. D. Riedel, A.-G.: The ash content of quassia was found to vary from 1.3 to 7.7 per cent.—Riedel's *Berichte*, 1912, p. 50.

QUEBRACHO BARK.

J. D. Riedel, A.-G.: The ash content of quebracho bark was found to vary from 7.2 to 7.6 per cent; amount of insoluble ash to 0.6 per cent.—Riedel's *Berichte*, 1912, p. 51.

Ruble, W. R.: Fluid extract of quebracho is useful for the relief of difficult breathing in whatever character, in doses from 10 to 20 drops.—*Electric M. J.* 1912, v. 72, p. 391.

QUERCUS.

J. D. Riedel, A.-G.: The ash content of quercus was found to vary from 5.1 to 7.3 per cent.—Riedel's Berichte, 1912, p. 49

QUILLAJA.

Rippetoe and Minor: One sample of soap bark contained 11.57 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 444.

J. R. Riedel, A.-G.: The ash content of soap bark was found to vary from 9.6 to 15.1 per cent.—Riedel's Berichte, 1912, p. 49.

Rosenthaler and Ström: A contribution on the chemistry of the saponin of white soap root.—Arch. Pharm. 1912, v. 250, p. 290-297.

Rusconi, Arnaldo: A method for the detection of saponin in aerated beverages, with bibliography on the subject.—Arch. farm. sper. 1912, v. 13, p. 1-14.

Sormani, Sesara: The detection of saponin in beverages and foods by hemolysis.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 23, p. 561-566.

Kobert, R.: The biologic valuation of quillaja.—Ber. pharm. Gesellsch. 1912, v. 22, p. 212.

Cook, Alfred N.: The use of soap bark should be prohibited in beverages.—Rep. F. & D. Com. South Dakota, 1912, p. 12

QUININA.

Editorial Note: The world's production of quinine is said to exceed 17,000,000 ounces per annum, all of which is consumed. The consumption is increasing annually in ratio to the production.—Chem. & Drug. 1912, v. 80, p. 611; see also Oil, Paint and Drug Rep. 1912, v. 81, Jan. 8, p. 35, and Feb. 5, p. 35.

Editorial: The quinine content of Java bark continues to increase, last year the average being 6.59 per cent, which is the highest so far recorded.—Chem. & Drug. 1912, v. 80, p. 88.

Gehe & Co.: Little change is to be noted in the condition of the quinine market despite the fact that the export of cinchona bark from Java was materially smaller in 1911 than in the previous year.—Handelsbericht, 1912, p. 125.

French, Harry B.: The decreased shipments, it is thought, are due not to any decreased production, but to a combination among the planters to restrict their shipments in order to secure higher prices for the bark.—J. Am. Pharm. Assoc. 1912, v. 1, p. 834.

Schaefer, George L.: Quinine alkaloid and some of its compounds.—Eighth Internat. Cong. Appl. Chem. 1912, v. 17, p. 75-84.

For discussion, see Vol. 28, p. 153; see also *Pharm. Post*, 1912, v. 45, p. 902, and *Chem. & Drug*, 1912, v. 81, p. 514.

LaWall, Charles H.: The thalleioquin test. A modification of Nelden's reagent. Bromine water is recommended in place of the usual chlorine water.—*Am. J. Pharm.* 1912, v. 84, p. 484-488.

E'We, Geo.: One sample, marked U. S. P., proved to be absolutely anhydrous.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 177.

Baldoni, Alessandro: The quantitative determination of quinine in the urine and in the blood.—*Arch. farm. sper.* 1912, v. 13, p. 324-352.

Mannheim, E.: The estimation of quinine, in iron and quinine citrate, according to the method outlined in the *Ph. Germ. V.*—*Apoth.-Ztg.* 1912, v. 27, p. 26-27.

Mannich and Schwedes: On the detection of quinine in the presence of pyramidon.—*Apoth.-Ztg.* 1912, v. 27, p. 343.

Grutterink, Alide: The microchemistry of quinine, with several illustrations.—*Ztschr. anal. Chem.* 1912, v. 51, p. 215; see also *Chem. Weekblad*, 1912, v. 9, p. 152-157.

Larrouturon, J.: Some additional studies on the fluorescence of quinine and the salts of quinine.—*Bull. Soc. pharm. Bordeaux*, 1912, v. 52, p. 60-67, 102-112, 154-160.

Dobbie and Fox: The absorption spectra of quinine and its relation to several quinoline compounds.—*J. Chem. Soc. Lond.* 1912, v. 101, p. 77-81.

Rabe, Paul: Contribution to the knowledge of cinchona alkaloids. Synthetic experiments.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 2163-2171.

Böttcher and Horovitz: Rearrangement of quinine by means of sulphuric acid.—*Monatsh. Chem.* 1912, v. 33, p. 567-582.

Biddle, H. C.: The conversion of cinchonine and quinine into their poisonous isomers, cinchotoxine, and pinotoxine, and the relation of this conversion to the toxicity of the cinchona alkaloids.—*J. Am. Chem. Soc.* 1912, v. 34, p. 500-515; see also *Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 526-528.

Rabe, F.: Critical remarks on the above contribution.—*Ber. deutsch. chem. Gesellsch.* 1912, v. 45, p. 1447-1449.

Mangold, Alfred C.: Comment on the discrepancy in pharmaceutical literature in regard to compounds of alkaloids with arsenious acid.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 17, p. 37-43.

Hommell, P. E.: Up to the present time, neither the U. S. P. nor the N. F. give a satisfactory formula for the proper administration in fluid form of that invaluable anti-malarial, quinine: various suggestions are made.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 96.

Roth, George B.: Action of quinine on leucocytes.—*J. Pharmacol. & Exper. Therap.* 1912-13, v. 4, p. 157-165.

Kink, C. D. R.: Poisoning with quinine inunction; report of several serious, not fatal, cases.—*Ellingwood's Therap.* 1912, v. 6, p. 56.

Davis, R. E.: Report of an eruption covering the entire body, with intense itching, 10 minutes after taking a 5-grain capsule of quinine.—*Am. J. Clin. Med.* 1912, v. 19, p. 429.

"V. T.": As quinine is fairly powerful in destroying life, it seems necessary to place some restriction on its sale.—*Chem. & Drug. Australas.* 1912, v. 27, p. 17.

Kloeman, L.: Report of experimental observations on the action of quinine on the normal gastrointestinal tract of dogs.—*Ztschr. physiol. Chem.* 1912, v. 80, p. 28.

Brown, O. H.: Pure quinine is more destructive to pneumococci than are its salts.—*J. Biol. Chem.* 1912, v. 11, p. xxxvi.

Smith, George G.: Wolff has found quinine efficacious in urticaria, and it is probable that quinine may also prove of value in other affections which may be due to anaphylaxis.—*Boston M. & S. J.* 1912, v. 167, p. 327.

Editorial: Semple is convinced that the tetanus infections occurring after clinical hypodermic or intramuscular injections of quinine are almost always due to the presence of tetanus spores lying latent within the organism and not to any infection on the needle or in the solution injected.—*New York M. J.* 1912, v. 95, p. 186.

Editorial: In 1902 there were 36.52 per cent of the inhabitants of Italy sick with malaria, and in 1909, 6.96.—*New York M. J.* 1912, v. 96, p. 753.

Ross & Thompson: Pseudorelapses in malaria during continuous quinine treatment (*Ann. Trop. Med. & Parasit.* v. 5, No. 3).—*J. Am. M. Assoc.* 1912, v. 58, p. 592.

For additional references see *Index Med.*; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.*; and *Chem. Zentralbl.*

QUININE AND UREA HYDROCHLORIDE.

According to the New York Branch of the A. Ph. A., this salt turns gray very quickly.—*Drug Topics*, 1912, v. 27, p. 35.

Grabin, C. S.: Surgery under quinine and urea hydrochloride. Some of the desirable features of this article as a local anæsthetic.—*Ellingwood's Therap.* 1912, v. 6, p. 50-51.

Wollheim, J. L.: Quinine and urea certainly alleviate in many cases or entirely obviate in some the pain and discomfort of most of the intramuscular injections of suspension of mercury salicylate.—*New York M. J.* v. 96, p. 175-177; see also editorial, p. 187.

Rightor, H. H.: A case of localized gangrene following the use of a 1 per cent solution of quinine and urea hydrochloride as a local anæsthetic.—*J. Am. M. Assoc.* 1912, v. 59, p. 878.

Dando, G. H.: Solution of quinine and urea hydrochloride used with success topically for a severe burn.—*Am. J. Clin. Med.* 1912, v. 19, p. 405.

Cohen, Solomon Solis: How to use quinine and urea hydrochloride, especially for systemic effect by injection in malaria and pneumonia.—*Merck's Arch.* 1912, v. 14, p. 145-147.

QUININÆ HYDROCHLORIDUM.

Schneider and Richter: The Ph. Germ. V requires 81.72 per cent of quinine corresponding to the theoretical requirement of the formula $C_{20}H_{24}N_2O_2 \cdot HCl \cdot 2H_2O$.—*Pharm. Zentralh.* 1912, v. 53, p. 231.

Anon.: Two samples of quinine hydrochloride were found to be free of secondary alkaloids.—*Südd. Apoth.-Ztg.* 1912, v. 53, p. 52.

Spindler: One sample of quinine hydrochloride badly contaminated with other cinchona alkaloids.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 11.

Editorial: After reviewing the relative merits of the 4 available salts of quinine, sulphate, bisulphate, hydrochloride and tannate, Wilkinson advocates the use of hydrochloride.—*Pharm. J.* 1912, v. 80, p. 804.

Gaglio, Gaetano: The combination of quinine hydrochloride with ethyl urethane for hypodermic injection.—*Boll. chim. farm.* 1912, v. 51, p. 220-222; see also *Arch. farmacol. sper.* 1912, v. 13, p. 273-276.

Marfori, P.: Note on the union of basic quinine chloride with urethane.—*Arch. farm. sper.* 1912, v. 13, p. 479.

Graham, W. M.: A dose of 15 grains of quinine hydrochloride causes an early increase in the amount of water excreted in the urine, followed within 24 hours by a marked decrease which is accompanied by an increase in the excreted pigments, consisting largely of urobilin (*Ann. Trop. Med. & Parasit.* v. 5, No. 3).—*J. Am. M. Assoc.* 1912, v. 58, p. 592.

QUININÆ SULPHAS.

Schneider and Richter: The Ph. Germ. V permits not exceeding 1 per cent of other alkaloids and a minimum content of 72.1 per cent of quinine corresponding to the formula $(C_{20}H_{24}N_2O_2)_2 \cdot H_2SO_4 \cdot 8H_2O$.—*Pharm. Zentralh.* 1912, v. 53, p. 232.

Brown, Linwood A.: Six samples analyzed; none contained more than 3 per cent water of crystallization.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 50.

E'We, Geo.: All samples examined were effloresced, causing a high alkaloidal content. One sample contained the equivalent of 107.6 per cent of U. S. P. quinine sulphate.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 177.

Spindler: One sample of quinine sulphate required 4.9 in place of 4 cc. of aqua ammonia for complete solution.—Südd. Apoth.-Ztg. 1912, v. 52, p. 11.

Krussse, P. J.: Gravimetric determination of quinine sulphate as nitroprusside.—Pharm. Weekblad, 1912, v. 49, p. 1117-1120.

Davidson, Jas.: Report of successful results from the injection of quinine sulphate solution into the broad ligament for prolapse of the uterus.—Brit. M. J. 1912, v. 2, p. 233.

QUININE TANNATE.

Feist, K.: Quinine tannate; a review of the Ph. Germ. V formula for making.—Apoth.-Ztg. 1912, v. 27, p. 567.

Mannheim, E.: The production and testing of quinine tannate.—Apoth.-Ztg. 1912, v. 27, p. 476-477, 486-487.

G. Hell & Co.: The Ph. Austr. VIII requirement, that quinine tannate dissolve in 30 parts of hot and 800 parts of cold water, is somewhat misleading. The material in solution has properties quite different from quinine tannate.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 35.

Pazienti, Umberto: The influence of oil of theobroma on the coefficient of solubility of quinine tannate.—Boll. chim. farm. 1912, v. 51, p. 576-579.

Puckner, W. A.: Examination of the commercial products available in this country showed them to be of only fairly good quality. One sample contained about 9 per cent of uncombined alkaloid.—J. Am. M. Assoc. 1912, v. 59, p. 1158; see also Puckner and Warren, J. Am. Pharm. Assoc. 1912, v. 1, p. 578-590.

Schneider and Richter: The Ph. Germ. V permits the presence of 10 per cent of water and a minimum content of 27 per cent of quinine.—Pharm. Zentralh. 1912, v. 53, p. 232-233.

Wester, D. H.: One sample of quinine tannate was found to contain but 26.6 per cent quinine.—Pharm. Weekblad, 1912, v. 49, p. 408.

Blackader, A. D.: Tasteless quinines have almost no value (Canadian M. Assoc. J. v. 2, No. 10).—J. Am. M. Assoc. 1912, v. 59, p. 1652.

RENNIN.

Zimmermann, A.: Report on a study of the properties of rennin, when prepared by different methods. The acceleration of the action of rennin by phosphoric acid. The variation in the length of time required to curdle different specimens of milk.—J. Ind. & Eng. Chem. 1912, v. 4, p. 506-508.

Pearson, W. A.: One sample labeled "Free from salt" was found to contain a considerable quantity of chlorides.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 177.

Beringer and E'Ve.: There seems to be an optimum proportion of NaCl which will give the highest milk coagulating power to rennin, above or below which the activity of the rennin is lowered. Milk sugar also increases the coagulating power of rennin but not to so great an extent as does sodium chloride.—J. Am. Pharm. Assoc. 1912, v. 1, p. 552-554.

Hedin, S. G.: Immunization against rennin action can be best accomplished by injection of the zymogen. A much longer immunization period is required if the enzyme is used.—Ztschr. physiol. Chem. 1912, v. 77, p. 229-246.

Alexander, Jerome: The rennin coagulation of milk from a colloid chemical standpoint.—Eighth Internat. Cong. Appl. Chem. 1912, v. 6, p. 12-14.

RESINA.

Pittruvsky, Kurt: The industry of "Naval Stores" in the United States.—Chem. Ind. 1912, v. 35, p. 447-452.

Schneider and Richter: The Ph. Germ. V requires that rosin be soluble in ether, chloroform, carbon disulphide, and benzol, and only partially soluble in petroleum benzin.—Pharm. Zentralh. 1912, v. 53, p. 286.

Schwalbe and Küderling: Investigation of rosins from a number of sources shows that the determination of the acid number is of very little use in the valuation of a rosin (Wochbl. Papierfabr. 42, 4197-8).—Chem. Abstr. 1912, v. 6, p. 430.

Herty and Dickson: The resenes of resins and oleoresins; a study of resene in resin from different species.—J. Ind. & Eng. Chem. 1912, v. 4, p. 495

RESINA JALAPÆ.

Pearson, W. A.: One sample contained 3.8 per cent of moisture and did not strictly fulfill the U. S. P. specifications for limit of saponifiable substances.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 177.

RESINA PODOPHYLLI.

J. D. Riedel, A.-G.: While podophyllin yields a clear solution with aqua ammonia, the combination is readily decomposed with the formation of a flocculent precipitate.—Südd. Apoth.-Ztg. 1912, v. 52, p. 183; see also Riedel's Berichte, 1912, p. 41.

Mann, E. W.: The resin from *Podophyllum peltatum* gave the following figures: ash 0.18 per cent, insoluble in alcohol (90 per cent), 1.05 per cent, insoluble in ammonia 9.40.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 44.

Bernegau and E'Ve.: The following results were obtained for 8 samples of resin of podophyllum: Alcohol soluble 92.2 to 98.0;

water soluble 26.1 to 45.1.—J. Am. Pharm. Assoc. 1912, v. 1, p. 126.

Patch, E. L.: Nine samples of podophyllin gave alcohol insoluble material varying from 0.8 to 11.8, and ash from 0.4 to 1.0.—J. Am. Pharm. Assoc. 1912, v. 1, p. 502.

Chase, Sara T.: Podophyllin is good in constipation where there is dizziness, coated tongue and bitter taste, and jaundice with clay colored stool.—Am. J. Clin. Med. 1912, v. 19, p. 86.

RESINA SCAMMONII.

Bourdier, L.: Brown resin of scammony. Its characteristics and adulterations.—J. pharm. et chim. 1912, v. 5, p. 97-107, 251-254; see also Répert. Pharm. 1912, v. 24, p. 157.

Guigues, P.: Scammony and scammony resins, with special reference to the communication of Bourdier.—Bull. Sc. pharmacol. 1912, v. 19, p. 641-648.

Becker, M.: The alcohol soluble portion of four samples varied from 98.65 to 99.25 per cent, and the ether soluble portion from 55.41 to 99.55 per cent.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 178.

Rippetoe and Minor: Seven samples of scammony resin contained from 0.12 to 4.15 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 443.

RESORCINOL.

Pearson, W. A.: One lot was rejected on account of its inferior appearance.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 177.

Raphaelson, Alfred: An enumeration of some of the advantages of a purified and pulverized resorcin.—Apoth.-Ztg. 1912, v. 27, p. 405.

Anon.: A revised working formula for compound resorcin ointment.—N. A. R. D. Notes, 1912, v. 14, p. 85; see also p. 301.

RHAMNUS PURSHIANA.

Schneider and Richter: The Ph. Germ. V now includes *Rhamnus purshiana* De Candolle, requires that the bark be stored for at least one year, and that it contain at least 24 per cent of extract.—Pharm. Zentralh. 1912, v. 53, p. 319.

Evans, Edward: It is estimated that the annual crop of cascara sagrada reaches about 1,000 tons. This drug is collected almost entirely in the forests of northern California and Oregon.—Year-Book of Pharmacy, 1912, p. 394.

McKesson, Irving: This valuable medicine has been practically exterminated in California, where it was originally obtained.—Proc. N. W. D. A. 1912, p. 169.

Gehe & Co.: Some explanations for the increase in the price of cascara sagrada are offered.—Handelsbericht, 1912, p. 57.

Henkel, Alice: In the experiments conducted by the Department of Agriculture a certain method of pruning has been followed which

forces the top of the plant into three or four branches; one of these branches may be cut each year for peeling, and another branch soon develops in its place.—*Drug. Circ.* 1912, v. 56, p. 133–134.

The “*Kew Bulletin*” reports experiments on the propagation of cascara sagrada from cuttings.—*Chem. & Drug.* 1912, v. 81, p. 919.

Miller, F. A.: Description, with illustrations, of several barks offered as cascara substitutes.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1207–12.

Kraemer, Henry: The medullary ray cells in *Rhamnus purshianus*, illustrated.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 846; see also *Am. J. Pharm.* 1912, v. 84, p. 385–388.

J. D. Riedel, A.-G.: Comments on the Ph. Germ. V requirements for cascara sagrada; bark frequently found containing more than the permissible 6 per cent of ash. The Ph. Ndl. IV permits a maximum of 10 per cent.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 182; see also Riedel's *Berichte*, 1912, p. 39.

Patch, Edgar L.: Cascara sagrada yielded 5 per cent ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1121.

Rippetoe and Minor: Three samples of cascara contained from 4.14 to 4.82 per cent of ash.—*Am. J. Pharm.* 1912, v. 84, p. 438.

J. D. Riedel, A.-G.: The ash content of cascara sagrada varies from 4.8 to 8.7 per cent; amount of insoluble ash to 0.5 per cent.—*Riedel's Berichte*, 1912, p. 49.

Mann, E. W.: A large number of samples of cascara showed a considerable amount of variation in cold water soluble extractive; from 19.50 to 27.07 per cent.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 9.

Tschirch and Bromberger: The bark of *Rhamnus cathartica* was found to contain rhamnosterin, rhamnofluorin, emodin, chrysophanol and *d*-glucose.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 193–197.

Caesar & Loretz: An outline of the method employed for determining the value of cascara sagrada.—*Jahres-Ber.* 1912, p. 124–126.

Büttner, E.: A simple apparatus for estimating the extract content of cascara sagrada bark.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 271.

Richter, R.: The Ph. Germ. V directs that “*extractum cascarae sagradae fluidum*” be made from “*cortex rhamni purshianae*.”—*Pharm. Zentralh.* 1912, v. 53, p. 442.

Linke: A critical discussion of the Ph. Germ. V method for making fluid extract of cascara sagrada.—*Apoth.-Ztg.* 1912, v. 27, p. 330–331.

Havenhill, L. D.: The effort to reduce the extract to a pulverizable condition on a water bath at 70° has been unsuccessful. Several sam-

ples have shown a dry extract greater than 25 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 860.

Diefenbach, A.: U. S. Pat. 1,043,209, Nov. 5, 1912. Process for preparing a refined extract from cascara sagrada; see also Ger. Pat. 240,407 of 1911.—J. Soc. Chem. Ind. 1912, v. 31, p. 1147.

Editorial Note: Efforts to get at the chemical constituents of certain drugs which have an aperient action have in many cases resulted in confirmation of traditional belief that the whole drug is better than its principles.—Chem. & Drug. 1912, v. 80, p. 579.

Anon.: The effect of the constant use of drugs like cascara can not be other than detrimental to the normal activities of the gastrointestinal tract.—Hahnemann. Month. 1912, v. 47, p. 211.

RHEUM.

Hosseus, Karl Kurt: Additional information regarding the origin of true rhubarb; some of the observations recently made by Tschirch are controverted.—Südd. Apoth.-Ztg. 1912, v. 52, p. 239-240.

Mitlacher, Wilhelm: Observations on the cultivation of Austrian rhubarb, a variety of *Rheum rhaponticum*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 432.

Xrayser II: Attempts to grow rhubarb in England were made long before Mounsey's introduction of the seed from Russia.—Chem. & Drug. 1912, v. 81, p. 255; see also p. 166.

Gane, E. H.: American rhubarb has been offered to the trade. The root is of a poor, grayish color, very spongy, and with little, if any, of the characteristic rhubarb odor.—J. Am. Pharm. Assoc. 1912, v. 1, p. 502.

Remington, J. P.: Henry Kraemer has found that the dark and wormy portion of rhubarb, commonly required to be rejected, is in some cases most valuable.—J. Am. Pharm. Assoc. 1912, v. 1, p. 479.

Planchon, Louis: Powdered rhubarb; a discussion of the adulteration of pharmaceutical powders.—Bull. Pharm. Sud-Est, 1912, v. 17, p. 381-391.

Oesterle, O. A.: On the constitution of natural chrysazin derivatives.—Arch. Pharm. 1912, v. 250, p. 301-306.

Tunmann, O.: The microsublimation of oxymethylantraquinone from rhubarb.—Apoth.-Ztg. 1912, v. 27, p. 971.

Caesar & Loretz: Outline of the method for testing rhubarb, including the colorimetric valuation according to Tschirch.—Jahres-Ber. 1912, p. 152-154.

Rippetoe and Minor: Three samples of rhubarb contained from 6.70 to 9.16 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 443.

J. D. Riedel, A.-G.: The ash content of rhubarb was found to vary from 7.1 to 12.8 per cent; amount of insoluble ash to 0.1 per cent.—Riedel's Berichte, 1912, p. 50.

Mann, E. W.: Five samples of powdered rhubarb yielded from 7.44 to 12.12 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 21.

J. D. Riedel, A.-G.: Otherwise satisfactory rhubarb root was frequently found to exceed 12 per cent of ash. The Ph. Helv. IV permits an upper limit of 13 per cent.—Riedel's Berichte, 1912, p. 41.

Ziegler, J.: A criticism of the Ph. Germ. V formula for the aqueous tincture of rhubarb. The omission of borax is deplored.—Apoth.-Ztg. 1912, v. 27, p. 518.

Richter: The use of sodium bicarbonate, without the addition of borax, yields a fairly stable aqueous tincture of rhubarb.—Apoth.-Ztg. 1912, v. 27, p. 539.

Anselmino and v. Gusnar: Tinctura rhei aquosa, and the differences of opinion regarding the new Ph. Germ. V formula.—Apoth.-Ztg. 1912, v. 27, p. 1008-1009.

40th Ann. Rep. Local Gov't Bd. 1910-11: Of 40 samples of tincture of rhubarb examined, 3 were found to be adulterated or not up to standard.—Brit. & Col. Drug. 1912, v. 61, p. 62.

RHUS GLABRA.

Bicknell, Eugene P.: *Rhus glabra* L., and several other species, are reported as growing on the island of Nantucket.—Bull. Torrey Bot. Club, 1912, v. 39, p. 423.

Gilmore, Melvin R.: The fruits of *R. glabra* were used by the Omaha Indians of Nebraska to make a poultice in case of poisoning.—Meyer Bros. Drug. 1912, v. 33, p. 138.

Needham, R. H.: *R. glabra* is never used nor prescribed; its use as a remedial agent amounts to nothing.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1346.

ROSA GALLICA.

Scoville, Wilbur L.: Samples of fluid extract of rose, at the end of 3 years, were found to have precipitated badly and in some cases the precipitate had caked together.—J. Am. Pharm. Assoc. 1912, v. 1, p. 337.

SABAL.

Rippetoe and Minor: One sample of saw palmetto contained 1.65 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 444.

Caldwell, Paul: Just why the committee overlooked the popularity of the elixir of sabal and recommends a strongly alcoholic tincture is a question. The tincture can never become useful because of its high alcoholic content.—Drug. Circ. 1912, v. 56, p. 70.

De Jonge, Cornelius: Unless 95 per cent alcohol is used as the menstruum there is a settling of a fatty layer in the liquid.—*Drug. Circ.* 1912, v. 56, p. 157; see also *J. Am. Pharm. Assoc.* 1912, v. 1, p. 272.

Finneran, James F.: The use of fresh palmetto berries is recommended in tincture of palmetto and santal. It is suggested to chill the preparation, to remove excess of fixed oil.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 277.

Hommell, P. E.: Tincture of saw palmetto and santal is a most valuable medication for diseases of the genitourinary tract.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 91.

Anon.: Saw palmetto constitutes a valuable drug in the treatment of undeveloped mammary glands.—*J. Am. Inst. Homœop.* 1911–1912, v. 4, p. 216.

SABINA.

Swain, Robert Lee: Savin is named from the Sabines, a powerful and, next to the Latins, the most prominent people of ancient Rome.—*Drug. Circ.* 1912, v. 56, p. 63.

J. D. Riedel, A.-G.: The ash content of sabina was found to vary from 5.3 to 6.3 per cent; amount of insoluble ash to 0.4 per cent.—*Riedel's Berichte*, 1912, p. 52.

SACCHARUM.

Dawson, Wm., jr.: Reports that the consumption of sugar in the United States for the year 1911–12 amounted to 2,154,859 metric tons, England 1,921,712, and Germany 1,262,734.—*Cons. & Tr. Rep.* November 18, 1912, p. 890.

Lay, Julius G.: Two hundred and ninety-one metric tons of sugar were shipped from Brazil to the United States in 1910, 12,260 tons in 1911.—*Cons. & Tr. Rep.* December 13, 1912, p. 1331.

von Lippman, Edmund O.: A review of progress in the production of beet sugar.—*Chem. Ztg.* 1912, v. 36, p. 145–146, 165–166.

Rolfe, Geo. W.: Some notes on sugar manufacture in Porto Rico.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 8, p. 59–74.

Spahr: Cane sugar cultivation in Louisiana.—*Tropenpflanzer*, 1912, v. 16, p. 517–526.

Gibbs, H. D.: The production of alcohol and sugar from the sap of the Nipa palm.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 8, p. 13–19.

Zimmermann, August: Brief abstract of a lecture on the manufacture of sugar from wood, and its economic importance.—*Chem. & Drug.* 1912, v. 81, p. 850.

Wiese, H.: Eng. Pat. 12,642, May 25, 1911. Process for the refinement of sugar. The process is applicable both to cane and to beet sugars.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 653.

Browne, Charles A.: The chemistry of raw sugar production.—*Sci. Am. Suppl.* 1912, v. 73, p. 182-183, 199.

Claassen, H.: The crystallization of sugar in practice, with some observations on the saturation factors at varying temperatures.—*Ztschr. ang. Chem.* 1912, v. 25, p. 930-935.

Zerban, Fritz: Objectionable nitrogenous compounds in sugar cane juice.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 8, p. 103-111.

Stoward, Frederick: On the influence exercised by certain acids on the inversion of saccharose by sucrase.—*Biochem. J.* Liverpool, 1912, v. 6, p. 131-140.

Strohmer and Fallada: Inversion of cane sugar solutions by means of ammonium chloride.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 8, p. 85-92.

Bierry, Henri and Ranc: Inversion of saccharose by ultra-violet rays.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 1151.

Berthelot and Gaudeschon: Phytolysis of saccharose by ultra-violet rays.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 401, 1016, 1153, 1506.

Euler and Ohlsén: Note on the inversion of saccharose by the ultra-violet rays.—*J. Chim. phys.* 1911, v. 9, p. 416.

Richter, R.: The carbonization of sugar by sulphuric acid; a new identity reaction in the Ph. Germ. V.—*Pharm. Zentrallh.* 1912, v. 53, p. 1092.

Jolles, Adolf: Comments on the quantitative determination of saccharose in foods and other articles of consumption.—*Pharm. Zentrallh.* 1912, v. 53, p. 1088-1089.

Nordhoff, B.: A simplified method for the estimation of sugar. A review of the method suggested by Rupp and Lehmann.—*Apoth.-Ztg.* 1912, v. 27, p. 8-9.

Tilford, J. Floyd: Of 22 samples of sugars examined, 4 were illegal.—*Rep. Kansas Bd. Health*, 1912, p. 113.

Meade, Geo. P.: Action of disinfectants on sugar solutions.—*Eighth Internat. Cong. Appl. Chem.* 1912, v. 8, p. 33-45; see also *Tr. Am. Inst. Chem. Eng.* 1912, 1913, v. 5, p. 88-99.

Lindet, L.: The antiseptic rôle of sea salt and sugar.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 790.

Loeb, Jacques: The toxicity of sugar solutions upon *Fundulus* and the apparent antagonism between salts and sugar.—*J. Biol. Chem.* 1912, v. 11, p. 415-420.

Anon.: The use of artificial sera; glucose as a constituent.—*Rev. Farm. Buenos Aires*, 1912, v. 55, p. 271-284.

Gouin and Andouard: Preliminary note on the action of sugar on nutrition.—*Compt. rend. Soc. Biol.* v. 73, p. 113.

Goulston, Arthur: West Indian cane sugar in the treatment of certain forms of heart disease.—*Brit. M. J.* 1912, v. 2, p. 693-695.

Dingle, Harry: A case of cardiac failure treated by cane sugar.—*Brit. M. J.* 1912, v. 1, p. 66.

Shaheen, H.: The use of cane sugar suggested in such cases as subinvolution of the uterus when the administration of drugs may have some retarding influence on the mammary secretion.—*Brit. M. J.* 1912, v. 1, p. 15.

For additional references see Eighth Internat. Cong. Appl. Chem. 1912, v. 8; Cons. & Tr. Rep.; *Zentralbl. Exper. Med.*; *J. Am. M. Assoc.*; *Chem. Abstr.* and *Chem. Zentralbl.*

SACCHARUM LACTIS.

Gehe & Co.: The production of sugar of milk in Germany materially decreased during the latter half of 1911.—*Handelsbericht*, 1912, p. 150.

Kühn, Hugo: A note on the chemical composition of milk sugar and the frequent contamination of this article with bacteria and other microorganisms.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 2-4; see also p. 92.

Richter, Ernst: Sugar of milk was found not to comply with the hydrogen sulphide test.—*Apoth.-Ztg.* 1912, v. 27, p. 50.

Lefeldt, M.: The Ph. Germ. V test for heavy metals is considered too severe.—*Pharm. Ztg.* 1912, v. 57, p. 372.

North, Horace: The present allowance of 0.25 per cent of ash is too liberal. Satisfactory lots never yield more than 0.1 per cent.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 61.

J. D. Riedel, A.-G.: The Ph. Germ. V requirement for heavy metals is too rigid; most preparations contain a trace of iron, which gives a distinct greenish coloration with ammonium sulphide.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 183; see also Riedel's *Berichte*, 1912, p. 41.

Bernegau and E'We: The U. S. P. test for "absence of cane sugar" in sugar of milk is unreliable. The Leffman-Oliver sesame oil test is an excellent substitute.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 126.

Parry, Ernest J.: Of nearly 100 samples of sugar of milk examined during the past 12 months not one contained any added matter.—*Chem. & Drug.* 1912, v. 81, p. 931.

SALES.

Hommell, P. E.: The proposed new N. F. formulas for granular effervescent salts are excellent, but only a few are frequently prescribed, Kissingen, Vichy, and Carlsbad. It would be wise to construct a formula for an effervescent bromide of potassium and sodium with caffeine.—Proc. New Jersey Pharm. Assoc. 1912, p. 90.

SAL CAROLINUM FACTITUM N. F.

Anon.: There is so little difference in the price of this preparation, whether made from common, so-called "technical," chemicals, or from chemically pure salts, that only the latter should be used.—N. A. R. D. Notes, 1912-1913, v. 15, p. 830; see also p. 834.

SALICINUM.

Bourquelot and Bridel: Action of emulsin on salicin in an alcoholic medium.—Compt. rend. Acad. sc. 1912, v. 154, p. 939; also J. pharm. et chim. 1912, v. 5, p. 388-392.

Bertrand and Compton: Note on the supposed reversibility of the diastasic hydrolysis of salicin.—Compt. rend. Acad. sc. 1912, v. 154, p. 1646-1648.

SALVIA.

Mitlacher, Wilhelm: Observations on the cultivation of *Salvia officinalis*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 447.

Rusby, H. H.: It is apparent that much of the "sage" that is imported consists of the *Salvia triloba* and other very similar species.—J. Am. Pharm. Assoc. 1912, v. 1, p. 503.

Rippetoe and Minor: Two samples of sage contained 8.05 and 8.72 per cent of ash respectively.—Am. J. Pharm. 1912, v. 84, p. 443.

J. D. Riedel, A.-G.: The ash content of sage was found to vary from 5.6 to 7.3 per cent.—Riedel's Berichte, 1912, p. 49.

Hommell, P. E.: A 10 per cent tincture of sage is frequently called for, not only by physicians but by the laity, to combine with glycerin, resorcin, and bay rum for scalp and hair treatment.—Proc. New Jersey Pharm. Assoc. 1912, p. 91.

SANGUINARIA.

Dohme and Engelhardt: An estimation of the total alkaloids of bloodroot might be valuable, although such a determination possibly does not indicate the therapeutic value of the drug.—J. Am. Pharm. Assoc. 1912, v. 1, p. 603.

Vanderkleed, Chas. E.: The assays of 14 samples of sanguinaria varied from 3.680 to 9.310 per cent of alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 180.

Bernegau, L. H.: One sample labeled *sanguinaria* yielded only 0.0423 per cent of yellowish residue in the regular assay process.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 178.

Meade, H. B.: Assay of fluid extract of *sanguinaria*; Blome's modification of Schlotterbeck's method.—J. Am. Pharm. Assoc. 1912, v. 1, p. 134.

Roberts, J. G.: One sample of fluid extract contained only 1.8 gm. of alkaloids in 100 cc.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 178.

Jackson, John R.: Tincture of *Sanguinaria canadensis* is recommended as a remedy for rhus poisoning.—Chem. & Drug. 1912, v. 80, p. 31.

Bayley, Weston D.: *Sanguinaria* is indicated in the treatment of patients, with occipital headaches going forward into the right brow, who are sleepless or have active dreams from which they awaken frightened.—Hahnemann. Month. 1912, v. 47, p. 100.

SANTONICA.

Gehe & Co.: The Russian crop of santonica for 1911 is reported to have been the smallest for three years, and this fact, with speculative manipulation, has advanced the price.—Handelsbericht, 1912, p. 64.

Frommé, G.: For determining the santonin content of santonica, chloroform is recommended as the initial solvent in place of hot alcohol, recommended by Katz. Three samples of santonica were found to contain from 1.725 to 2.26 per cent of santonin. (Arch. Pharm. 1899, 245).—Caesar & Loretz Jahres-Ber. 1912, p. 39-45; see also p. 133-135.

Rippetoe and Minor: Two samples of santonica contained 9.03 and 11.30 per cent of ash respectively.—Am. J. Pharm. 1912, v. 84, p. 443.

J. D. Riedel, A.-G.: The ash content of santonica was found to vary from 7.1 to 9.4 per cent; amount of insoluble ash to 2.9 per cent.—Riedel's Berichte, 1912, p. 49.

SANTONINUM.

Gehe & Co.: The price of santonin is still increasing, due primarily to speculative manipulation and also to some extent to failure in the crop of crude material.—Handelsbericht, 1912, p. 152.

Mindes, J.: A mixture of 0.01 gm. of santonin, 1 drop of ferric chloride solution, 10 drops of water, and 30 drops of sulphuric acid becomes reddish-brown, and on subsequent cooling the color becomes

even more intense, but is destroyed by the addition of 10 cc. of water to the liquid.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 93.

Merck, E.: Samples of santonin, examined in 1904, consisted of boric acid, in 1 case of borax, with only traces of santonin. A more recent sample revealed the presence of boric acid without a trace of santonin.—*Chem. & Drug.* 1912, v. 80, p. 493.

Umney, John C.: There is at present on the London market santonin adulterated, in Hamburg, with 20 to 25 per cent of acetanilide.—*Brit. & Col. Drug.* 1912, v. 61, p. 230; see also Editorial, p. 234, and *Pharm. J.* 1912, v. 88, p. 349, 379, 382, 445.

Diekman, George C.: Of the three samples of santonin examined, two conformed to official requirements and one contained acetanilide.—*Proc. New York Pharm. Assoc.* 1912, p. 131.

Xrayser II: The adulteration of santonin appears to be a pretty old story; santonica itself used to be adulterated with tansy seeds.—*Chem. & Drug.* 1912, v. 80, p. 543.

Kropat, K.: The valuation of santonin pastilles and a method for determining the santonin content of such pastilles.—*Apoth.-Ztg.* 1912, v. 27, p. 452.

Climax: Modified santonin, produced by exposure of the ordinary drug to sunlight, is believed by many medical men who have practiced in the Far East to be a specific for that form of dysentery known as sprue.—*Chem. & Drug.* 1912, v. 81, p. 349.

Munk, J. A.: Santonin is known as a good worm medicine, but this represents only a small fraction of its real value, which is found in its power to relieve and control a train of nervous reflexes, which arise from disturbance of the organs that are located in the abdomen and pelvis.—*Ellingwood's Therap.* 1912, v. 6, p. 48-50.

SAPO.

Goldschmidt, Franz: The modern development of the soap and crude glycerin industry. A discussion of some of the methods employed in their production.—*Ztschr. ang. Chem.* 1912, v. 25, p. 808-816.

Gane, E. H.: Much of the so-called pure olive oil soap contains a large proportion of coconut oil soap. This is easily recognized by the characteristic taste.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

North, Horace: The market is flooded with fraudulent Castile soaps. Nine brands, chiefly domestic, have been rejected.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 84.

Ford, Charles M.: Imitation Castile soap is one of the many forms of adulteration, either ignored by the U. S. Department of Agriculture or legalized by a ruling made in the interest of big business, otherwise it would not be found in interstate commerce.—*Proc. Nebraska Pharm. Assoc.* 1912, p. 107.

Frery, Guy G.: At the present time "Castile Soap" is a very indefinite term and practically none of the commercially available article complies with the U. S. P. tests for "sapo."—*Proc. South Dakota Pharm. Assoc.* 1912, p. 38.

Cock, Alfred N.: We have found that most of the so-called Castile soap on the market is not Castile soap at all, but has been prepared from animal fats or from various vegetable oils.—*Bull. No. 33, South Dakota Food and Drug Dep.* 1912, p. 2.

Noyes, C. Reinold: Castile soap may be bought and sold as such without its meeting the requirements of the U. S. P. for sapo, but if used in a U. S. P. formula or sold as U. S. P. it must be a true olive oil soap.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 45.

Nitardy, F. W.: Two samples of Castile soap were found to contain coconut oil and animal fat respectively.—*Rocky Mountain Drug-gist*, 1912, v. 26, July, p. 20.

Mann, E. W.: The majority of the samples examined gave results in accordance with the description of olive oil soap. Three samples were abnormal, two contained coconut oil and one cottonseed oil.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 41.

Frery, Guy G.: None of the 28 samples of soap examined can meet the alkalinity test of the *Pharmacopœia*.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 38.

Scoville, W. L.: Powdered Castile soap contains 2.5 to 5 per cent of water. The cake contains 11 to 26 per cent of water. Much offered as Castile soap is made from animal fat.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

Dück: A sample of powdered soap was rancid and had a yellow color.—*Schweiz. Wchschr. Chem. u. Pharm.* 1912, v. 50, p. 516.

Anon.: Illustrated description of a process for the dustless grinding of soap.—*Am. Perf.* 1912-13, v. 7, p. 6.

Huggenberg and Stadlinger: An illustrated description of a modified sapometer.—*Chem. Ztg.* 1912, v. 36, p. 938.

Schrauth, W.: The disinfecting power of soap solutions depends upon the relation between the alkali salts of the saturated and unsaturated fatty acids and on the purity of the soap itself. (*Seifen-fabr.*, 32, 461-3, 489-90).—*Chem. Abstr.* 1912, v. 6, p. 2013.

SAPO MOLLIS.

Bernegau and E'Ve: In an outline of the test for limit of free alkali, it is suggested that the soap be dissolved in absolute alcohol with the aid of heat and the filtrate titrated with oxalic acid.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 127.

North, Horace: A method of determining the alkalinity is outlined. It is difficult to find soap in the market answering the U. S. P. requirement in this respect. The upper limit for free alkali should

be stated; a lower limit is unnecessary. In no case examined has the amount of matter insoluble in alcohol exceeded 1 per cent. Of 31 samples analyzed, 4 were excessively alkaline, 14 were practically neutral, and 11 were U. S. P.—Rep. Lehn & Fink's Analyt. Dept. 1910-1912, 1913, p. 85.

SARSAPARILLA.

Kebler, L. F.: Rhizomes have been shipped to the United States and used in preparing medicines recognized by the Pharmacopœia and in making semiofficial and other sarsaparilla preparations. Such rhizomes in powdered form can not be recognized safely without the use of a microscope.—J. Am. M. Assoc. 1912, v. 59, p. 1604.

Gehe & Co.: The available supply of sarsaparilla during the year 1911 has been satisfactory, and it is to be noted that the consumption is being more and more restricted to the better qualities of the Honduras drug.—Handelsbericht, 1912, p. 100.

Rippetoe and Minor: Four samples of sarsaparilla contained from 8.20 to 32.45 per cent of ash.—Am. J. Pharm. 1912, v. 84, p. 444.

J. D. Riedel, A.-G.: The ash content of sarsaparilla was found to vary from 3.6 to 6.9 per cent; amount of insoluble ash to 1.8 per cent.—Riedel's Berichte, 1912, p. 50.

Kunze: Report of fluid extract of sarsaparilla having a specific gravity of 1.053.—Südd. Apoth.-Ztg. 1912, v. 52, p. 160.

Editor, "Therapeutics": Sarsaparilla has no local action, and internally it is practically devoid of any physiological action whatsoever.—J. Am. M. Assoc. 1912, v. 58, p. 1356-1357.

Sormani, Sesara: The detection of saponin in beverages and foods by hæmolysis.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 23, p. 561-566.

Rühle, J.: The detection of saponin, the reaction of Vamvaka, color reactions, summary. The Vamvaka reaction does not differentiate between saponin and glycyrrhizin.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 23, p. 566-577.

Kobert, R.: On the pharmacologic importance and the biologic testing of sarsaparilla and related drugs. The action of the contained saponin.—Ber. pharm. Gesellsch. 1912, v. 22, p. 205-242; see also Pharm. Ztg. 1912, v. 57, p. 213-214.

SASSAFRAS.

Swain, Robert Lee: *Sassafras variifolium* signifies that the plant produces leaves of various shapes, for on the same plant occur many forms, such as cuneate, ovate, and entire.—Drug. Circ. 1912, v. 56, p. 64.

Schirmer, Wolfgang: The chemistry and properties of the mucilage obtained from *S. variifolium* (Salisbury) O. Kuntze.—Arch. Pharm. 1912, v. 250, p. 241.

SCAMMONIUM.

Ballard, Charles W.: Note on true scammony and Mexican scammony root; illustrated by two charts showing the microscopic appearance of powdered Mexican scammony and of powdered genuine scammony. Also some observations on the action of reagents on the resins obtained from the two roots.—J. Am. Pharm. Assoc. 1912, v. 1, p. 127-130; see also Ann. chim. analyt. 1912, v. 17, p. 235.

Rusby, H. H.: While it is true that practically all of the scammony on the market violates the U. S. P. requirements, in having been extracted from the dried instead of the living root of scammony, the amount of that coming from Mexican scammony, although large, does not predominate.—J. Am. Pharm. Assoc. 1912, v. 1, p. 503.

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Needham, R. H.: Sodium chlorate, like its very similar preparation, potassium chlorate, is used entirely in mouth washes and gargles and for making chlorine water. It is never prescribed.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1347.

SODII CHLORIDUM.

Phalen, W. C.: According to a report to the U. S. Geological Survey, the production of salt in the United States in 1911 was 31,183,968 barrels of 280 pounds each, an increase compared with 1910 of 878,312 barrels.—*Oil, Paint and Drug Rep.* 1912, v. 82, July 1, p. 48; see also *Cons. & Tr. Rep.* July 6, 1912, p. 111.

Turrentine, Merz and Gardner: Composition of the salines of the United States. A study of (I) rock salt, artificial brines, and mother liquors from artificial brines; (II) Natural (Subterranean) brines and mother liquors from natural brines.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 828-833, 885-889.

Jänecke, E.: A review of the Kayser method for the production of sodium chloride.—*Chem. Ztg.* 1912, v. 36, p. 28-29.

Campbell, O. H.: A peculiar case of common salt poisoning in a boy, aged five, resulting from the use of an enema containing a pound of salt to a quart of water.—*J. Am. M. Assoc.* 1912, v. 59, p. 1290; see also editorial p. 1560.

Editorial: A second case of sodium chloride poisoning reported by Brooks, in which the patient received about 9 ounces of salt. (*Arch. Int. Med.* November, 1910, p. 577.)—*J. Am. M. Assoc.* 1912, v. 59, p. 1297.

Barlow, C. Heman: Throughout Chekiang Province, and probably in other provinces of China, the drinking of a saturated solution of salt is a common mode of committing suicide, and there is none more difficult to treat.—*J. Am. M. Assoc.* 1912, v. 59, p. 1811.

Bain, John: Report of a case of œdema in a child 2 years old as a result of the excessive ingestion of salt.—*Brit. M. J.* 1912, v. 2, p. 880. Middleton, W. J. p. 1057, and Stevenson, A. p. 1749; reports of similar cases in older patients.

Lindet, L.: The antiseptic rôle of sea salt and sugar.—*Compt. rend. Acad. Sc. Paris*, 1912, v. 155, p. 790.

Kleiner, Israel S.: On the effects of sodium bicarbonate and sodium chloride upon the convulsions produced by heroin and strychnine. (Abstract.)—*J. Pharmacol. & Exper. Therap.* 1912-13, v. 4, p. 357-359.

Katzoff, Simon L.: Common salt has been and is being used with some success in intermittent fever.—*Am. J. Clin. Med.* 1912, v. 19, p. 760.

Flemming, A. L.: Where a previous injection of saline has been given there is generally little acetonuria or unpleasant after effects from ether and chloroform.—*Lancet*, 1912, v. 182, p. 434.

Floersheim, Samuel: The influence of sodium chloride upon the hydrochloric acid of the gastric juice.—*Med. Rec.* 1912, v. 81, p. 1089.

Armand-Delille and Launoy: The antianaphylactic action of saturated solutions of sodium chloride.—*Compt. rend. Soc. Biol.* 1912, v. 72, p. 61.

Leszynsky, William M.: The treatment of sciatica by perineural infiltration, with report of results in 25 patients.—*Med. Rec.* 1912, v. 81, p. 314.

Bennett and Gamble: Normal saline solution is a solution of sodium chloride containing 0.91 gm. in 99.09 gm. of distilled water. The rise in temperature which follows intravenous injections is now attributed to bacterial proteins which can not be removed by filtration or destroyed by sterilization.—*Chem. & Drug.* 1912, v. 80, p. 402.

Bennett and Gamble: The statement in the Codex that normal saline is preferably made with tap water which contains traces of calcium and potassium salts will no longer hold good, and a probable refinement of the near future will be the use of freshly distilled water, collected without exposure to air, for the preparation of all solutions intended for intravenous injection.—*Pharm. J.* 1912, v. 88, p. 356.

Richter, R.: In the dispensing of physiological salt solutions care must be exercised that they are absolutely clear and free from specks and dirt. Total freedom from foreign material is not obtained by filtration through ordinary filter paper, and it is therefore desirable to underlay the filter paper with a layer of absorbent cotton.—*Pharm. Zentralh.* 1912, v. 53, p. 1153-1156.

Caldwell, Paul: Physiological salt solution should not be included in the National Formulary, for the reason that no one will ever require that it be made outside a hospital.—*Drug. Circ.* 1912, v. 56, p. 69; see also Roemer, John, *Drug. Circ.* 1912, v. 56, p. 246.

SODII CITRAS.

Elvove, Elias: Ten samples of sodium citrate, assayed by the author's method, were found to be from 80.66 to 99.77 per cent pure.—*Am. J. Pharm.* 1912, v. 84, p. 294.

Brown, Linwood A.: Seven samples examined; three gave turbid solutions; one, deficient in water of crystallization, contained the equivalent of 121.8 per cent U. S. P. sodium citrate.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 51.

Smith, F. A. Upsher: Sodium citrate gives very great relief in gastric pain.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 842.

Editorial: According to Lacheny, sodium citrate relieves gastric suffering coming on three or four hours after meals and has a remarkable curative effect on the morning vomiting of drunkards.—*Med. Rec.* 1912, v. 82, p. 993.

Weaver, W. H.: Sodium citrate in the treatment of pneumonia.—*Merck's Arch.* 1912, v. 14, p. 357-360.

SODIUM GLYCEROPHOSPHATE.

Scoville, W. L.: Sodium glycerophosphate is often alkaline enough in reaction to give trouble in preparations containing it.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

Bernegau, L. H.: Of seven samples examined, only one was below strength (73.6 per cent), the other six ranging from 79.06 to 82.7 per cent.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 172.

SODII HYDROXIDUM.

Scoville, W. L.: Caustic soda runs from 88 to 98.6 per cent pure.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

Bassett, L. P.: *Fr. Pat.* 443,810, July 22, 1911. Manufacture of sodium hydroxide.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 1031.

Rising, Adolf: Tests for carbon dioxide free solutions of sodium hydroxide.—*Svensk farm. Tidskr.* 1912, v. 16, p. 549-551, 566-568.

SODII IODIDUM.

Kroeber, Ludwig: A sample of sodium iodide was found to contain considerable quantities of carbonate.—*Apoth.-Ztg.* 1912, v. 27, p. 183.

Osborne, Oliver T.: Of all the iodides the sodium iodide seems the best. Potassium is always depressant; sodium is rarely so.—*J. Am. M. Assoc.* 1912, v. 59, p. 1163.

SODII NITRAS.

Washington Correspondent: The total consumption of sodium nitrate in the world is given at 2,460,000 tons, of which Continental Europe took 1,711,000 tons and the United States 503,000 tons. This

is a sharp falling off in the amount taken by the United States compared with 1910 and 1911.—Oil, Paint and Drug Rep. 1912, v. 82, Oct. 14, p. 48; see also v. 81, April 8, p. 60.

Bernthsen, H. A.: Table showing the amount of Chili saltpeter produced in the years 1900–1912, inclusive.—Eighth Internat. Cong. Appl. Chem. 1912, v. 27, p. 202.

Remington, J. P.: Sodium nitrate was not put in the Pharmacopœia because of its use at the prescription desk, but because of its use in the process of making spirit of nitrous ether.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1348.

J. D. Riedel, A.-G.: The test for perchlorate should be made on the same dilution of the salt as is the test for chloride.—Südd. Apoth. Ztg. 1912, v. 52, p. 183; also Riedel's Berichte, 1912, p. 40.

Diaz-Ossa, B.: The manufacture of Chili saltpeter. A discussion of the technical and commercial aspect of a threatened industry.—Sc. Am. Suppl. 1912, v. 74, p. 82–83; also Eighth Internat. Cong. Appl. Chem. 1912, v. 2, p. 187–204.

McMullen, E. W.: Chilean nitrate deposits.—Chem. Eng. 1912, v. 15, p. 166–168.

Allen, Walter S.: Rational analysis of nitrate of soda. The use of the Devardo method *vs.* the misleading "refraction method."—Eighth Internat. Cong. Appl. Chem. 1912, v. 1, p. 19–31. For discussion see vol. 28, p. 6.

SODII NITRIS.

Porter, William H.: It is in the pure hypertensions before profound pathologic changes have occurred in the walls of the vessels that sodium nitrite is most valuable.—J. Am. M. Assoc. 1912, v. 59, p. 396.

SODIUM PERBORATE.

Gehe & Co.: Sodium perborate has developed into an article of considerable commercial importance. It is used extensively as a bleaching agent, also to some extent as an addition to soap for laundry purposes. For pharmaceutical purposes it is used in the production of oxygen baths and as a cosmetic agent.—Handelsbericht, 1912, p. 146.

Bosshard and Zwicky: The constitution of the perborates.—Ztschr. ang. Chem. 1912, v. 25, p. 993–995.

Anon.: Monograph with tests for sodium perborate.—Apoth.-Ztg. 1912, v. 27, p. 244.

v. Girséwald, C. Frhr.: A review of the progress in the chemistry of peroxides and persalts during the years 1909–1911, with a list of preparations and their uses.—Chem. Ind. 1912, v. 35, p. 35–44, 69–76; see also Pharm. Post, 1912, v. 45, p. 728.

SODII PHENOLSULPHONAS.

Needham, R. H.: For a number of years the clinical results of all the phenolsulphonates have been observed, with the conclusion that they are very unreliable.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1347.

McEwan, Donald: Sodium phenolsulphonate, as compared with its use in 1888, is now scarcely, if ever, prescribed.—*Pharm. J.* 1912, v. 88, p. 331.

Kahn, Joseph: The phenolsulphonates were introduced into medicine with the idea that when taken internally they would be decomposed into phenol and sulphate, but experience does not agree with theory in this case.—*Proc. New York Pharm. Assoc.* 1912, p. 170.

SODII PHOSPHAS.

Editorial: An arsenic limit for phosphate of soda, of 5 parts per million, has been established in Canada by an Order in Council.—*Pharm. J.* 1912, v. 89, p. 804.

Feubel, A.: Sodium phosphate contaminated with arsenic appears to be present on the market in larger quantities than hitherto. (*Fäber-Zeit.*, 1912, v. 23, p. 235-236.)—*J. Soc. Chem. Ind.* 1912, v. 31, p. 584.

Brown, Linwood A.: Fourteen samples examined; water of crystallization varying from 20.35 to 59.12 per cent.—*Proc. Kentucky Pharm. Assoc.* 1912, p. 51.

Patch, E. L.: The first sample, which was dried and purified, contained 10 per cent sulphate, 1.5 per cent water. The second sample (U. S. P.) contained excess of sulphate and chloride, and 0.5 per cent of water.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

Dück: A sample of sodium phosphate examined contained sulphate.—*Schweiz. Wchnschr. Chem. u. Pharm.* 1912, v. 50, p. 516.

Prideux, L. B. R.: The sodium phosphate standards of acidity.—*Biochem. J. Liverpool*, 1912, v. 6, p. 122-126.

Burnett, J. A.: Solution of sodium phosphate.—*Phys. Drug News*, 1912, v. 7, p. 223-224.

Jessup Committee: Report on cell stimulation by means of prolonged ingestion of sodium phosphate.—*Biochem. J. Liverpool*, 1912, v. 6, p. 163.

SODII SALICYLAS.

Elvove, Elias: Ten samples of sodium salicylate, assayed by the author's method, were found to be from 95.99 to 100 per cent pure.—*Am. J. Pharm.* 1912, v. 84, p. 294.

Bohrisch, P.: The Ph. Germ. V test for chloride in sodium salicylate should require an excess of HNO_3 .—*Pharm. Ztg.* 1912, v. 57, p. 190.

Lyons, A. B.: A plan for determining by titration both acid and base in sodium salicylate and other salicylates of the alkalies.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 526.

De Jonge, Cornelius: After standing 20 days, compound elixir of sodium salicylate had to be filtered; and had again formed a precipitate at the end of a month.—*Drug. Circ.* 1912, v. 56, p. 157.

Osborne, Oliver T.: Of all the salicylic acid preparations offered, it is simply a question of regulation of the dose.—*J. Am. M. Assoc.* 1912, v. 59, p. 1163.

Kloeman, L.: A report of experimental observations on the action of sodium salicylate on the normal gastrointestinal tract of dogs.—*Ztschr. physiol. Chem.* 1912, v. 80, p. 24.

Laqueur, Ernst: Report of experimental observations on the influence of sodium salicylate on the autolysis and metabolism.—*Ztschr. physiol. Chem.* 1912, v. 79, p. 38-64.

Crouzet: Sodium salicylate, when it is to be administered in large doses, may be given in a concentrated solution in milk and mucilage as an enema. (*Gaz. hôp.*)—*N. York M. J.* 1912, v. 95, p. 183.

Heyn, L. G.: Acute articular rheumatism treated by the rectal administration of sodium salicylate.—*J. Am. M. Assoc.* 1912, v. 58, p. 1013.

Burgess, W. M.: In acute cases of rheumatism, sodium salicylate may be given with double the amount of sodium bicarbonate or with equal amounts of ammonia, potash or soda.—*Practitioner*, 1912, v. 88, p. 208.

J. D. Riedel, A.-G.: Seibert recommends the hypodermic use of sodium salicylate in acute rheumatism.—*Riedel's Berichte*, 1912, p. 56.

Hanzlik, Paul J.: The "toxic dose" of the salicylates according to clinical statistics. (Abstract).—*J. Pharmacol. & Exper. Therap.* 1912-13, v. 4, p. 346-347.

Waddell, J. A.: A comparative investigation of the effects and toxicity of sodium salicylates of natural and synthetic origin.—*Repr. Therap. Res. Com.* 1912, p. 5-32.

Eggleston, Cary: The relative value of the natural and synthetic salicylates: a study of the literature.—*Repr. Therap. Res. Com.* 1912, p. 33-56.

SODII SULPHAS.

Bontaric and Leenhardt: Cryoscopy in sodium sulphate with 10 molecules of water.—*Compt. rend. Acad. Sc. Paris.* 1912, v. 155, p. 825.

Patch, E. L.: Dried sodium sulphate tested satisfactorily, nearly anhydrous.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

Editorial: For the present Glauber's and Epsom salts may remain in the group of the saline purgatives which owe their efficiency to the difficulty which they present to the processes of absorption.—*J. Am. M. Assoc.* 1912, v. 59, p. 38.

Brown, Thomas R.: Studies on the motor functions of the stomach by the use of gastric and duodenal fistulas, especially as regards the influence of the bitter waters and bitter salts—that is, those containing magnesium sulphate or sodium sulphate.—*Am. J. M. Sc.* 1912, v. 144, p. 682–697.

SODII SULPHIS.

Strickler, E. H.: U. S. Pat. 1,023,179, April 16, 1912. Process for making anhydrous sodium sulphites and bisulphites.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 489; see also *Eng. Pat.*, p. 1032.

Patch, E. L.: Results of tests of 4 samples of sodium sulphite, 2 of which were up to standard, 2 contained chlorides.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

SODII THIOSULPHAS.

Wilson, A. M.: A 25 per cent solution of sodium hyposulphite will cure any and every case of tinea versicolor.—*N. York M. J.* 1912, v. 95, p. 1121.

Sabbatani, L.: Swabbing the skin with 5 per cent tepid solution of sodium hyposulphite, 5 or 10 minutes after it has been painted with tincture of iodine, obviates the local irritation from the latter (*Gaz. Osp. e Clin.* v. 33, No. 58).—*J. Am. M. Assoc.* 1912, v. 58, p. 2054.

SPARTEINÆ SULPHAS.

The Belgian Pharmacopœial Commission recommends that spartheinum sulfuricum be included in the supplement to the *Ph. Belg.* Characters and tests are outlined.—*J. pharm. Anvers*, 1912, v. 68, p. 667.

Moureu and Valeur: A further report on the chemistry of spartheine.—*J. pharm. et chim.* 1912, v. 6, p. 103–108, 145–147, 199–203; see also *Compt. rend. Acad. sc.* 1912, v. 154, p. 161 and p. 309; also *Ann. chim. et phys.* 1912, v. 27, p. 245–391.

Germain, Alberto: The oxidation of spartheine by potassium permanganate.—*Boll. chim. farm.* 1912, v. 51, p. 111–113.

Corrieze, Louis: Description and analysis of some salts of methyl spartheine.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 527–540.

Corrieze, Louis: Some new salts of spartheine.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 468–480. See also 602–610.

Anon.: The administration of sparteine after operation insures a more uniform and efficient circulation, especially a better capillary circulation, and this tends to promote primary union.—*Am. J. Clin. Med.* 1912, v. 19, p. 1202.

SPIGELIA.

Henkel, Alice: *Spigelia* is readily cultivated in Georgia, though it has never been cultivated in this country on a commercial scale.—*Drug. Circ.* 1912, v. 56, p. 132.

Sanders, C. E.: Fifty-seven samples of pinkroot were obtained from various sections of the country and carefully examined, compared with four plants of true *spigelia* from the Bureau of Plant Industry, cross sections of the rhizomes and roots being made and compared microscopically. None were true pinkroot, although many were up to the U. S. P. description.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 502.

Pearson, W. A.: One lot was examined which contained roots of seven different plants.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 179.

North, Horace: Of 17 samples examined, 7 were regarded as *Spigelia marilandica*, 3 as *Phlox ovata* and 2 as *Ruellia ciliosa*.—*Rep. Lehn & Fink's Analyt. Dept.* 1910-1912, 1913, p. 74.

McKesson, Irving: Within the past decade the pure food law has made and unmade some long used botanical remedies. It is deplorable that *ruellia* is still being sold as true pink root, and that a valuable remedy should thus be given an evil reputation through no fault of its own.—*Proc. N. W. D. A.* 1912, p. 169.

Patch, Edgar L.: Pinkroot yielded 28.5 per cent ash, while select pinkroot yielded 8.16 per cent ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1121.

Cartier, François: *Spigelia* acts especially on the nerves of animal life and upon the fibrous and muscular tissues of the heart.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 241.

Anon.: In rheumatic involvement of the heart *spigelia* should be compared with aconite.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 1049.

SPIRITUS.

Wiebelitz: A review of the Ph. Germ. V directions for making distilled spirits.—*Pharm. Ztg.* 1912, v. 57, p. 796-797.

Schnabel: The production of the medicated spirits of the Ph. Germ. V.—*Apoth.-Ztg.* 1912, v. 27, p. 887.

Richter, R.: Some additional comments on the Ph. Germ. V medicated spirit.—*Pharm. Ztg.* 1912, v. 57, p. 863, 939-940.

SPIRITUS AETHERIS NITROSI.

Brown, Linwood A.: Sweet spirit of nitre, a suggestion for a change in the formula.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 32.

Meeker, G. H.: In the calculations upon the assay of spirit of nitrous ether, one does not find, except inferentially, any statement for the value of the crith.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 26.

Jones, D. F.: A simple apparatus for determining the percentage of ethyl nitrate in spirit of nitrous ether.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 137.

Noyes, C. Reinold: "Sweet spirits of nitre" should be made from concentrated nitrous ether in tubes. Every advantage is on the side of this method.—*Proc. South Dakota Pharm. Assoc.* 1912, p. 46.

Jordan, C. B.: Brief note on the keeping qualities of sweet spirit of nitre.—*Proc. Indiana Pharm. Assoc.* 1912, p. 63.

Cook, Alfred N.: Sweet spirit of nitre should be prepared in the smallest possible quantities and kept in a cool, dark place. When it gets to be a month old, it should be thrown away and a new stock prepared, as it has been demonstrated that it will not keep long without deterioration.—*Rep. South Dakota F. & D. Com.* 1912, p. 76.

Ladd, E. F.: Don't load up with sweet spirits of nitrous ether and have it deteriorate and become worthless.—*Northwestern Drug.* 1912, v. 13, Aug. p. 65.

Strode, Sylvanus E.: Investigations prove that some few of the pharmacists of the State are not giving any attention whatever to the suggestions of the drug inspectors who have for some years endeavored to impress upon the druggists the importance of keeping sweet spirit of nitre in small, dark, amber glass, stoppered bottles.—*Ann. Rep. Ohio Dairy and Food Com.* 1911, 1912, p. 20.

Woods, Chas. D.: When sweet spirit of nitre is made from concentrated nitrous ether, as is now commonly the case, unusual care should be observed in mixing to insure uniformity.—*Proc. Maine Pharm. Assoc.* 1912, p. 42.

Barnard, H. E.: A sample labeled sweet spirits nitre was found to be compound spirits ether.—*Rep. Indiana Bd. Health.* 1911, 1912, p. 265.

Abbott: Some of the manufacturers in Texas put up nitrous ether in diluted alcohol of 40, 50, 60, and 70 per cent, and some of the right per cent.—*Proc. Texas Pharm. Assoc.* 1912, p. 47.

Richter, Ernst: Spirit of nitrous ether was found to be acid.—*Apoth.-Ztg.* 1912, v. 27, p. 50.

Table showing some of the analytical results reported for spirit of nitrous ether.

Reporters.	Number of samples.		References.
	Examined.	Rejected.	
Abbott, J. S.	27	24	Rep. Texas F. & D. Com. 1912, p. 22.
Ann Rep. Local Govt. Bd. 1910-11.	217	51	Brit. & Col. Drug. 1912, v. 61, p. 62.
Barnard, H. E.	10	10	Rep. Indiana Bd. Health, 1911, 1912, p. 273.
Brown, Linwood A.	75	52	Proc. Kentucky Pharm. Assoc. 1912, p. 51.
Cook, Alfred N.	16	12	Rep. South Dakota F. & D. Com. 1912, p. 50.
De Barr, Edwin.	6	4	Rep. Oklahoma P. H. Dept. 1912, p. 456.
Emery, J. Q.	1	1	Rep. Wisconsin D. & F. Com. 1912, p. 25.
Ford, Chas. M.	2	2	Bull. Colorado Bd. Health, 1911, v. 11, December, p. 5.
Halverson, J. O.	8	6	Ann. Rep. Missouri Food & Drug. Com. 1912, p. 9.
Do.	3	2	Bull. Missouri Dept. Food & Drug. Inspec. 1912, v. 4, p. 6.
Howard, Chas. D.	34	27	Rep. New Hampshire Bd. Health, 1912, p. 171.
Do.	32	24	Bull. New Hampshire Bd. Health, 1912, v. 1, p. 20-22.
Jaffa, M. E.	12	12	Proc. California Pharm. Assoc. 1912, p. 86.
Klueter, Harry.	26	20	Rep. Wisconsin Dairy & Food Com. 1912, p. 60.
McGill, A.	74	32	(Bull. 234, p. 11, Ottawa, Canada). Chem. Abstr. 1912, v. 6, p. 2669.
Massachusetts Bd. Health.	3	3	Monthly Bulletin, 1912, v. 7, p. 328.
Potter, Hubert F.	19	19	Rep. Connecticut Dairy & Food. Com. 1912, p. 37-38.
Sayre, L. E.	2	2	Bull. Kansas Bd. Health, 1912, v. 8, Nos. 7-12, p. 150.
Stallings, R. E.	32	26	Bull. Georgia Dept. Agric. No. 56, [1912], p. 133-135.
Strode, Sylvanus E.	2	1	Ann. Rep. Ohio Dairy and Food Com. 1911, 1912, p. 66.
Tilford, J. Floyd.	3	1	Rep. Kansas Bd. Health, 1912, p. 113.
Wulling, Frederick J.	5	5	J. Am. Pharm. Assoc. 1912, v. 1, p. 1122.

SPIRITUS AMMONIÆ.

Brown, Linwood A.: Two samples analyzed, both dispensed with cork stoppers, assayed 0.8 and 8.69 per cent NH_3 , respectively.—Proc. Kentucky Pharm. Assoc. 1912, p. 47.

SPIRITUS AMMONIÆ AROMATICUS.

Brown, Linwood A.: Methods for determining ammonia, carbon dioxide, and alcohol in aromatic spirit of ammonia are outlined and results of analyses given.—Am. J. Pharm. 1912, v. 84, p. 7-14; also Am. Druggist, 1912, v. 60, p. 102.

Jensen, H. R.: Tabulated summary of the rather subtle analytical standards involved in the composition of the aromatic spirit of ammonia, with a method of determination.—Pharm. J. 1912, v. 88, p. 4.

Wortham, Thomas F.: On examination of 6 samples of aromatic spirit of ammonia purchased in the open market, as compared with one of known strength and purity, the percentage of NH_3 gas varied between 1.65 and 2.22.—Proc. Virginia Pharm. Assoc. 1912, p. 109.

Table showing some of the analytical results reported for aromatic spirit of ammonia.

Reporters.	Number of samples—		References.
	Exam-ined.	Re-jected.	
Brown, Linwood A.	72	64	Proc. Kentucky Pharm. Assoc. 1912, p. 47.
Savre, L. E.	5	3	Bull. Kansas Bd. Health, 1912, v. 8, Nos. 7-12, p. 149.
Tilford, J. Floyd.	5	4	Rep. Kansas Bd. Health, 1912, p. 113.
40th Ann. Rep. Local Govt. Bd. 1910-11.	18	4	Brit. & Col. Drug. 1912, v. 61, p. 62.
Anon.	16	3	Pharm. J. 1912, v. 89, p. 810.

SPIRITUS ANISI.

Howard, Chas. D.: Of 23 samples of spirit of anise examined, 6 were not conformable.—Rep. New Hampshire Bd. Health, 1912, p. 171.

SPIRITUS FRUMENTI.

Cowie, W. B.: Abstract of a paper on the manufacture and composition of whisky.—Pharm. J. 1912, v. 88, p. 212.

Schoofs, F.: Impurities in alcohol, whisky, and gin.—Ann. falsif. 1912, v. 5, p. 397-401; see also p. 76-78.

Juckenack, A.: The valuation of alcoholic liquors.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 24, p. 64-66; see also p. 66-84, discussion of the above, and p. 84-90.

Anon.: Prosecution for the sale of whisky 47.5° under proof, 22.5° below the minimum legal limit.—Brit. Food J. 1912, v. 14, p. 240.

Barnard, H. E.: Of 18 samples of whisky analyzed, 5 were found to be illegal.—Rep. Indiana Bd. Health, 1911, 1912, p. 257.

Strode, Sylvanus E.: Two samples analyzed; one not passed.—Rep. Ohio Dairy and Food Com. 1912, 1913, p. 77.

SPIRITUS GLYCERYLIS NITRATIS.

Göpner, C.: The production of nitroglycerin; with diagrams.—Chem. Ind. 1912, v. 35, p. 8-15.

Hofwimmer, Fr.: A contribution on the manufacture of nitroglycerin.—Chem. Ztg. 1912, v. 36, p. 961-962.

Schmidt, G.: The manufacture of nitroglycerin: the outline of a plant, with comments by C. Göpner.—Chem. Ind. 1912, v. 35, p. 139-141.

Hyde, A.: Boiling points of solutions of nitroglycerin.—Eighth Internat. Cong. Appl. Chem. 1912, v. 4, p. 59-67.

Engelhardt, Hermann: The determination of nitroglycerin, with a suggestion for official requirements.—D.-A. Apoth.-Ztg. 1912, v. 33, p. 142-143.

Askenstedt, F. C.: Report of clinical observations of the effect of spirit of nitroglycerin on vascular tension.—Am. J. Clin. Med. 1912, v. 19, p. 353.

Jensen, H.: Nitroglycerin should not be considered a powerful heart stimulant. It is a powerful vasodilator.—Am. Vet. Rev. 1911-12, v. 40, p. 355.

Cartier, François: The action of nitroglycerin given by the mouth begins in about 2 minutes, and therefore nothing is gained by resorting to the hypodermic use of this drug.—J. Am. Inst. Homœop. 1911-1912, v. 4, p. 371.

Evans, E. S.: A case of nitroglycerin poisoning from absorption of nitroglycerin through the skin of the hands.—J. Am. M. Assoc. 1912, v. 58, p. 550.

Pirrie, R. Reid: Report of a number of cases of poisoning among workmen accustomed to the daily handling of nitroglycerin.—Practitioner, 1912, v. 88, p. 259-284.

SPIRITUS MYRCIÆ N. F.

Needham, R. H.: It is suggested that bay leaves be restored to the U. S. P. and bay rum also. It compares favorably with some other drugs that are retained which have official preparations.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1348.

Strode, Sylvanus E.: One sample of bay rum examined was not passed.—Ann. Rep. Ohio Dairy & Food Com. 1911, 1912, p. 65.

Mann, E. W.: The average phenol content of three samples of oil of bay varied from 67.0 to 76.2 per cent.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 25.

SPIRITUS VINI GALlici.

Rocques, X.: Analysis of brandy in cases where but small samples are available.—Ann. chim. analyt. 1912, v. 17, p. 86-88.

Juckenack, A.: Report on resolutions on the nature and valuation of cognac, rum, arrak, fruit brandies, whisky and other alcoholic liquors.—Ztschr. Unters. Nahr. u. Genussm. 1912, v. 24, p. 84-90.

Barnard, H. E.: Of 9 samples of brandy examined, 6 were found to be illegal.—Rep. Indiana Bd. Health, 1911, 1912, p. 257.

Editorial: The Yokohama Correspondent states that poisoning with methyl alcohol among the better class of people in Tokyo has recently occurred, and the Government found that most of the cheap brandy sold was adulterated with methyl alcohol.—Chem. & Drug. 1912, v. 80, p. 615.

STAPHISAGRIA.

Patch, Edgar L.: Stavesacre yielded 13 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

Raubenheimer, Otto: Lotio delphinii; a formula for larkspur lotion, thought to be an improvement on a similar preparation of stavesacre.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1138-1139.

Needham, R. H.: Staphisagria is good for pediculi, but evidently kerosene is used forty times to its once.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1345.

Leming, Wm.: While the primary sphere of staphysagria seems to be the central nervous system, a number of its most important actions apparently are disassociated from this field.—Eclectic M. J. 1912, v. 72, p. 230.

STILLINGIA.

Thomas: Stillingia sylvatica was a favorite remedy for syphilis with the early Eclectics and was usually combined with iodide of potassium.—Eclectic M. J. 1912, v. 72, p. 531.

STRAMONIUM.

Mitlacher, Wilhelm: Observations on the cultivation of *Datura stramonium*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 391.

Gazey, R.: A review of the varying pharmacopœial requirements for belladonna, hyoseyamus, and stramonium.—Apoth.-Ztg. 1912, v. 27, p. 402.

Dohme and Engelhardt: The aliquot part method of assay has decided advantages over the U. S. P. process and gives very satisfactory results.—J. Am. Pharm. Assoc. 1912, v. 1, p. 603.

Miller and Meader: The alkaloidal content of individual plants of *Datura stramonium* L. and *D. tatula* L.—Eighth Internat. Cong. Appl. Chem. 1912, v. 17, p. 57-61; see also Am. J. Pharm. 1912, v. 84, p. 446-449.

Richter, R.: The Ph. Germ. V includes a comprehensive description of the microscopical characteristics of stramonium leaf. The ash is not to exceed 20 per cent.—Pharm. Zentralh. 1912, v. 53, p. 507.

J. D. Riedel, A.-G.: The ash content of stramonium was found to vary from 15.9 to 19.5 per cent; amount of insoluble ash to 5.3 per cent.—Riedel's Berichte, 1912, p. 49.

Caesar & Loretz: Several samples of stramonium leaves were examined, the lowest ash content being 11.38 per cent. The others varied between 17.82 and 22.82 per cent.—Jahres.-Ber. 1912, p. 103.

Kremers, Edward: Stramonium raised in Wisconsin gave an alkaloidal yield of 0.4 per cent. The stalks have been used in paper making and the immature seeds yield a useful fatty oil. Moreover

the dregs of the seed after the extraction of the oil are richer in alkaloidal content than the best leaf raised.—Proc. N. W. D. A. 1912, p. 191.

Dohme and Engelhardt: There was no reason for reducing the standard for stramonium leaves from 0.35 per cent to 0.25 per cent, since shipments with more than 0.35 per cent are easily available.—J. Am. Pharm. Assoc. 1912, v. 1, p. 103.

Table showing reported variations in alkaloidal content of stramonium.

Reporter.	Number of samples.	Mydriatic alkaloids.		References
		Minimum.	Maximum.	
		<i>Per cent.</i>	<i>Per cent.</i>	
Patch, E. L.	4	0.198	0.41	J. Am. Pharm. Assoc. 1912, v. 1, p. 503.
Gane, E. H.	2	.14	.17	J. Am. Pharm. Assoc. 1912, v. 1, p. 503.
Vanderkleed, Chas. E.	11	.189	.470	Proc. Pennsylvania Pharm. Assoc. 1912, p. 180.
Seoville, Wilbur L.	110	.25	.45	J. Am. Pharm. Assoc. 1912, v. 1, p. 1341.

Diekman, George C.: In 3 samples of fluid extract of stramonium examined, the alkaloid content varied from 0.20 to 0.27.—Proc. New York Pharm. Assoc. 1912, p. 129.

Neyron: Report of a nonfatal case of poisoning in a child of 5 years, who had swallowed the berries of *D. stramonium*.—Répert. Pharm. 1912, v. 24, p. 495.

Parkinson, H. H.: Report of a case of poisoning in a boy 4 years of age, from stramonium administered by mistake for senna; recovery.—Chem. & Drug. Australas. 1912, v. 27, p. 127; see also editorial, p. 138.

Osborne, Oliver T.: There is no action of belladonna, stramonium, or hyoscyamus that is not that of either atropine or scopolamine; therefore, with these two alkaloids we can do away with all of the other preparations of these three closely allied drugs.—J. Am. M. Assoc. 1912, v. 59, p. 1162.

STRONTII BROMIDUM.

Diekman, George C.: Of 5 samples of strontium bromide examined, 4 were found to conform with official requirements, and one contained a considerable quantity of strontium hydrate.—Proc. New York Pharm. Assoc. 1912, p. 131.

Brown, Linwood A.: Five samples analyzed; all conformed to U. S. P.—Proc. Kentucky Pharm. Assoc. 1912, p. 50.

Callender, M. R.: Bromide of strontium given in large doses controls attacks of epilepsy more effectively than the usual bromides, and is more often followed by a cure.—Lancet, 1912, v. 182, p. 1644.

STRONTII SALICYLAS.

Brown, Linwood A.: Four samples examined; two contained large amounts of barium, in one case as much as 1.6 per cent metallic barium, a very poisonous adulterant.—Proc. Kentucky Pharm. Assoc. 1912, p. 50.

STROPHANTHUS.

Richter, R.: The Ph. Germ. V recognizes only the seed of *Strophanthus kombé* Oliver.—Pharm. Zentrallh. 1912, v. 53, p. 1132–1134.

Adlung: *S. kombé* is exported in considerable quantities from German East Africa.—Apoth.-Ztg. 1912, v. 27, p. 137.

Sharp, Gordon: Some comparisons of *S. courmontii* with *S. kombé* and other species.—Pharm. J. 1912, v. 88, p. 159.

Goris and Vischniac: The chemical composition of strophanthus seeds.—Bull. Sc. pharmacol. 1912, v. 19, p. 488–500.

J. D. Riedel, A.-G.: The ash content of strophanthus was found to vary from 3.8 to 4.8 per cent; amount of insoluble ash to 0.5 per cent.—Riedel's Berichte, 1912, p. 50.

Caesar & Loretz: An outline of the Fromme method of assay for strophanthus.—Jahres-Ber. 1912, p. 163–165.

Dohme and Engelhardt: There is no reason why strophanthus should not be assayed. A reliable process has been worked out.—J. Am. Pharm. Assoc. 1912, v. 1, p. 603.

Caesar & Loretz: A tincture of strophanthus made from the deoiled drug is considered to be more uniform in its action and certainly has a better appearance.—Jahres-Ber. 1912, p. 85–86.

Houghton, E. M.: Protocols of experiments performed in the determination of the standard for tincture of strophanthus.—Am. Druggist, 1912, v. 60, p. 7, 60, 141.

Rezzaghi, I.: Strophanthus and the Ph. Ital. III tincture of strophanthus.—Boll. chim. farm. 1912, v. 51, p. 149–150.

Stewart, F. E.: Twelve samples of tincture of strophanthus assayed showed a variation of 55 to 277 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1452.

Emery, J. Q.: The tincture of strophanthus examined contained wood alcohol.—Rep. D. & F. Com. Wisconsin, 1912, p. 26.

Goodall, Alexander: Six out of 14 samples of tincture of strophanthus, 1885, showed a departure from average potency.—Pharm. J. 1912, v. 89, p. 131; also Chem. & Drug. 1912, v. 81, p. 206.

Anon.: A résumé of the literature on digitalis and strophanthus.—Arch. Farm. og Chem. 1912, v. 19, p. 1–7, 32–35, 42–49, 72–80, 89–100.

Hamilton, H. C.: Table showing the relation of the minimum lethal dose unit to the heart tonic unit.—Am. J. Pharm. 1912, v. 84, p. 102–103.

Cushny, Arthur R.: In dilution with water the effect of strophanthus is rapidly lost. There is considerable danger of overdilution in prescribing.—*Brit. M. J.* 1912, v. 2, p. 247, 685.

Gunn, J. A.: The congenital tolerance of the rat to strophanthus.—*J. Pharmacol. Exper. Therap.* 1912-13, v. 4, p. 225-233.

Cartier, François: Strophanthus, prescribed in mother tincture and in material doses is the poorest of the cardiac tonics.—*J. Am. Inst. Homœop.* 1911-1912, v. 4, p. 246.

Editorial: Apropos of the so-called standardized preparations of digitalis, ergot, strophanthus, etc., it almost looks as if biologic assays of this class of preparations had been largely a matter of printer's ink.—*J. Am. M. Assoc.* 1912, v. 58, p. 705.

STROPHANTHINUM.

Richter, R.: K-strophanthin and g-strophanthin are two widely different substances and care should be exercised not to confound them.—*Pharm. Zentralh.* 1912, v. 53, p. 1134.

Herzig and Schönbach: A report on the experimental methylation of strophanthin.—*Monatsh. Chem.* 1912, v. 33, p. 679-681.

Ieffter and Sachs: Research on the strophanthus glucosides.—*Biochem. Ztschr.* 1912, v. 40, p. 83-124.

Gros, Oskar: Note on the pharmacodynamics of strophanthin.—*Arch. exper. Path. u. Pharmacol.* 1912, v. 71, p. 364-372.

Cushny, Arthur R.: The action of strophanthin injected intravenously is in every way similar to that obtained by tincture of digitalis given by the mouth except that the results are obtained in hours instead of days.—*Brit. M. J.* 1912, v. 2, p. 686.

According to O. Loewi, there must exist a functional antagonism between the effects of potassium and strophanthin; strophanthin counteracts the potassium effect.—*Pharm. J.* 1912, v. 89, p. 350.

Baker, W. F.: A review of some of the literature on the variation in frogs, and how far such variations can be obviated by the use of ouabain.—*Am. J. Pharm.* 1912, v. 84, p. 247-256.

Editorial: Strophanthin in heart disease.—*Merck's Arch.* 1912, v. 14, p. 132-4.

STRYCHNINA.

Dott, D. B.: The nitric acid test for brucine in strychnine, given by the *Ph. Brit.* and other pharmacopœias, is unsatisfactory.—*Year-Book of Pharmacy*, 1912, p. 436; see also *Pharm. J.* 1912, v. 89, p. 144, 171, and *Chem. & Drug.* 1912, v. 81, p. 205.

Fuller, H. C.: The oxidation reaction for strychnine can not be relied upon absolutely and in all circumstances.—*Merck's Rep.* 1912, v. 21, p. 206.

Mangold, Alfred C.: Comment on the discrepancy in pharmaceutical literature in regard to compounds of alkaloids with arsenious acid.—Eighth Internat. Cong. Appl. Chem. 1912, v. 17, p. 37-43.

Putt, Earl B.: Some microchemical tests for strychnine; with illustrations.—J. Ind. & Eng. Chem. 1912, v. 4, p. 511.

Grutterink, Alide: The microchemical detection of strychnine and brucine, with several illustrations.—Chem. Weekblad, 1912, v. 9, p. 126-139; see also Ztschr. anal. Chem. 1912, v. 51, p. 196-208.

Denigés, G.: The nature of the crystals formed by the hydration of strychnine by hydrochloric acid and zinc.—Bull. Soc. pharm. Bordeaux, 1912, v. 52, p. 145-146.

Leuchs and Brewster: A further contribution on strychnos alkaloids, derivatives of brucinolone.—Ber. deutsch. chem. Gesellsch. 1912, v. 45, p. 201-221; see also p. 3686-3691.

Heubner and Loewe: The central paralyzing action of strychnine.—Arch. exper. Path. u. Pharmakol. 1912-13, v. 71, p. 174-209.

Dusser de Barenne, J. G.: Action of strychnine on the central nerve system.—Arch. farm. sper. 1912, v. 14, p. 167-173.

Chase, Sara T.: Strychnine is a good adjuvant to digitalis and aconitine, also to the antispasmodics in colics and dysurias and dysmenorrhœas.—Am. J. Clin. Med. 1912, v. 19, p. 86.

Coghlan, E. F.: Hypodermic use of atropine, strychnine, and adrenalin, advocated in the treatment of cardiac depression in diphtheria.—Brit. M. J. 1912, v. 1, p. 534; see also F. G. Crookshank, p. 669.

Kleiner, Israel S.: On the effects of sodium bicarbonate and sodium chloride upon the convulsions produced by heroin and strychnine. (Abstract.)—J. Pharmacol. & Exper. Therap. 1912-13, v. 4, p. 357-359.

Wallace and Pamment: The only type of low blood pressure favorably affected by strychnine is that characterized by moderate depression of the vasomotor center, such as may be brought about by chloral.—J. Am. M. Assoc. 1912, v. 59, p. 219.

Editorial: The effect of strychnine on the blood pressure, with special reference to the conflicting results of R. C. Cabot, and of Cook and Briggs.—J. Am. M. Assoc. 1912, v. 58, p. 414.

Osborne, Oliver T.: As a cardiac stimulant, strychnine is very much overused.—J. Am. M. Assoc. 1912, v. 59, p. 1162; see also p. 2317.

The Registrar-General reports for England and Wales in 1910, 9 accidental deaths and 11 suicides from strychnine.—Pharm. J. 1912, v. 89, p. 96.

STRYCHNINÆ NITRAS.

Mindes, J.: A solution of 0.01 gm. of strychnine nitrate in 1 cc. of water and one drop of ferric chloride solution underlaid with 1 cc. of sulphuric acid, yields an orange-red zone at the point of contact. On the addition of one drop of potassium bichromate solution this becomes reddish-brown.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 93.

Ryan, A. H.: The absorption of strychnine nitrate by the mucous membrane of the Pawlow "miniature stomach" of the dog.—*J. Pharmacol. & Exper. Therap.* 1912-13, v. 4, p. 43-58.

STRYCHNINÆ SULPHAS.

Dott, D. B.: The strychnine sulphate which crystallizes in distinct prisms contains $5\frac{1}{2}$, and not 5 molecules of water as generally stated.—*Chem. & Drug.* 1912, v. 80, p. 527; see also *Pharm. J.* 1912, v. 88, p. 425; see also p. 477.

Askenstedt, F. C.: Report of clinical observations of the effect of strychnine sulphate on vascular tension.—*Am. J. Clin. Med.* 1912, v. 19, p. 353.

STYRAX.

Tunmann, O.: The principal native market for styrax is Mughla, the drug being sent by way of Stanchio or Smyrna to Trieste, the chief market for this drug.—*Apoth.-Ztg.* 1912, v. 27, p. 72.

Ahrens, C.: Contributions to our knowledge of *Styrax liquidus*, with tables showing the amount and properties of the benzin extract.—*Ztschr. öffentl. Chem.* 1912, v. 18, p. 267-272; see also *Aph.-Ztg.* 1912, v. 27, p. 651, and Schimmel & Co., Semi-Annual Report, 1912, October, p. 125.

Hill and Cocking: Recently the difficulty of obtaining genuine storax has been accentuated. Seven samples examined showed the following variations: Acid value, between 58.3 and 113.1; ester value, between 91.3 and 145.9; saponification value, between 194.6 and 205.9; total cinnamic acid, between less than 5 per cent and 30.68 per cent. Modifications in the assay process are suggested.—*Chem. & Drug.* 1912, v. 80, p. 412; see also p. 789, Editorial, p. 410, and a historical note by Xrayser II, p. 459.

Dück: Two samples of storax examined contained resin and fats.—*Schweiz. Wehnschr. Chem. u. Pharm.* 1912, v. 50, p. 515.

Mann, E. W.: One of two samples of storax examined was obviously sophisticated and was almost destitute of the peculiar aroma characteristic of this drug.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 23.

SULPHONETHYLMETHANUM.

Puckner, W. A.: The Council on Pharmacy and Chemistry recommends that the present description in N. N. R. be modified to indicate more clearly that the name trional is a synonym for the official title sulphonethylmethane, and that the tests of identity and purity prescribed in the U. S. P. should apply to the product dispensed under this title.—*J. Am. M. Assoc.* 1912, v. 58, p. 1298; also *Rep. Council Pharm. & Chem.* 1912, p. 12-14.

An unsigned article suggests "sulphonetmet., U. S. P." as an abbreviation for the official title, sulphonethylmethanum.—*N. A. R. D. Notes*, 1911-1912, v. 13, p. 819.

Richter, R.: The Ph. Germ. V now permits not exceeding 0.1 per cent of residue in methylsulfonyl or trional.—*Pharm. Zentralh.* 1912, v. 53, p. 803.

Rogers, Arthur W.: A case of fatal hæmatoporphyrinuria following the prolonged use of trional and sulphonyl.—*J. Am. M. Assoc.* 1912, v. 58, p. 1510.

SULPHONMETHANUM.

Puckner, W. A.: The Council on Pharmacy and Chemistry recommends that the present description in N. N. R. be modified to indicate more clearly that the name sulphonyl is a synonym for the official title sulphonmethane and that the test of identity and purity prescribed in the U. S. P. should apply to the product dispensed under this title.—*J. Am. M. Assoc.* 1912, v. 58, p. 1298; also *Rep. Council Pharm. & Chem.* 1912, p. 12-14.

An unsigned article suggests "sulphonmet., U. S. P." as an abbreviation for the official title, sulphonmethanum.—*N. A. R. D. Notes* 1911-1912, v. 13, p. 819.

Editorial: Sulphonyl and its derivatives are included in the recently promulgated Japanese poison law.—*Chem. & Drug.* 1912, v. 80, p. 876.

Editorial: The sale of sulphonyl, with special reference to a recent inquest at Peterborough.—*Brit. M. J.* 1912, v. 1, p. 507.

Editorial: Comment on the chemistry of certain of the mercaptol derivatives, apropos of the proposed addition of sulphonyl and trional to the scheduled poisons. The danger of general and comprehensive entries for the poison schedule is pointed out.—*Chem. & Drug.* 1912, v. 80, p. 408.

Editorial: By resolution of the Council of the Pharmaceutical Society, sulphonyl, its derivatives and the poisonous derivatives of mercaptol, should be included in the poison schedule.—*Lancet*, 1912, v. 182, p. 813.

Rogers, Arthur W.: A case of fatal hæmatoporphyrinuria following the prolonged use of trional and sulphonal.—*J. Am. M. Assoc.* 1912, v. 58, p. 1510.

The Registrar-General reports for England and Wales in 1910, 9 accidental deaths and 1 suicide from sulphonal.—*Pharm. J.* 1912, v. 89, p. 96.

SULPHUR.

Pough and others: Present a comprehensive review of the development of the Louisiana sulphur industry and a no less interesting account of the several accomplishments of the inventive genius who devised the plans for overcoming the difficulties involved and succeeded in revolutionizing the sulphur trade of the world.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 131-147.

The Geological Survey reports that the production of sulphur in the United States in 1911 amounted to 265,664 long tons, as compared with 255,534 tons in 1910.—*Cons. & Tr. Rep.* June 22, 1912, p. 1264.

Editorial: A review of the Sicilian sulphur industry for the year ending July 31, 1911, shows an increase in exports of 48,588 metric tons, with a decrease in production of 4,756 tons.—*Chem. & Drug.* 1912, v. 81, p. 87.

Bonney, Wilbert L.: The great bulk of Mexican sulphur is obtained from the mines near Cerritos in the State of San Luis Potosi.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 232; see also *Chem. Trade J.* 1912, v. 50, p. 280.

Lucas, A. F.: Geology of the sulphur and sulphur oil deposits of the coastal plain.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 140-143.

Heczko, Arnold: The determination of sulphur in pyrites.—*Ztschr. anal. Chem.* 1912, v. 51, p. 1-14.

Pough, F. H.: Sulphur mines of the Union Sulphur Company in Louisiana, with illustrations showing the method of mining, storing, and shipping the material.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 143-147.

Rep. Local Govt. Bd. 1910-11: Of 152 samples of sulphur examined, 4 were found to be adulterated or not up to standard.—*Brit. & Col. Drug.* 1912, v. 61, p. 62; see also *Pharm. J.* 1912, v. 89, p. 810.

Havenhill, L. D.: The range of nonvolatile matter in 11 samples examined was from 0.006 per cent to 0.1 per cent. On the other hand, no sample of precipitated sulphur examined has been free from nonvolatile matter. A maximum limit of 0.3 per cent is suggested for each.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 861.

Ruys, J. D.: On the titrimetric determination of sulphur.—*Chem. Weekblad*, 1912, v. 9, p. 892-984.

Davis and Fourcar: A rapid volumetric method for the estimation of free sulphur.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 100.

Biberfeld, Joh.: Sulphur, as such, possesses no known physical action and becomes active only when combined with hydrogen, alkalis, or with oxygen.—*Ergeb. Physiol.* 1912, v. 12, p. 93.

Editorial: The laxative action of sulphur. Some of the element becomes converted into hydrogen sulphide in the large intestine and probably in some measure in the upper intestine as well. This derivative provokes the discharge of the faecal masses.—*J. Am. M. Assoc.* 1912, v. 59, p. 1631.

Editorial: Sulphur lotion is sometimes found by medical practitioners to produce variable results, and even with the same formula the active ingredient will seem more energetic at one time than at another.—*Pharm. J.* 1912, v. 89, p. 641.

SULPHUR PRÆCIPITATUM.

Tunmann, O.: Precipitated sulphur on keeping for an appreciable length of time will develop an acid reaction which should be provided for in the pharmacopœial requirements.—*Apoth.-Ztg.* 1912, v. 27, p. 84; see also *Pharm. Ztg.* 1912, v. 57, p. 372.

Mann, E. W.: One sample of precipitated sulphur contained 20 parts per million of arsenic, all the others were of satisfactory quality.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 41.

Tables showing some of the analytical results reported for precipitated sulphur.

Reporters.	Number of samples—		References.
	Exam-ined.	Re-jected.	
Brown, Linwood A.....	30	22	<i>Proc. Kentucky Pharm. Assoc.</i> 1912, p. 50.
Emery, J. Q.....	1	1	<i>Rep. Wisconsin D. & F. Com.</i> 1912, p. 25.
Jaffa, M. E.....	14	7	<i>Proc. California Pharm. Assoc.</i> 1912, p. 86.
Fitz-Randolph, R. B.....	9	1	<i>Rep. New Jersey Bd. Health</i> , 1911, 1912, p. 226.
Klueter, Harry.....	1	1	<i>Rep. Wisconsin D. & F. Com.</i> 1912, p. 91.
Street, John Phillips.....	15	3	<i>Rep. Connecticut Agric. Exper. Sta.</i> 1912, p. 208.

SULPHUR SUBLIMATUM.

J. D. Riedel, A.-G.: Sublimed sulphur leaving a residue of 1 per cent would be an inferior grade and one seldom met with in commerce. An upper limit of 0.2 per cent would probably be sufficient.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 183; also *Riedel's Berichte*, 1912, p. 41.

Havenhill, L. D.: The statement that sublimed sulphur is readily soluble in carbon disulphide should be modified. Several samples yielded a content of insoluble sulphur of about 4.5 per cent. If the

Purity Rubric is to remain, an assay method ought to be supplied.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 862.

SUMBUL.

Needham, R. H.: Sumbul seems to be used only in patents and proprietaries, and as such only is it prescribed.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1346.

Macht, David I.: The ordinary commercial variety of sumbul on the market, as used in the United States, is an inert, useless, and needlessly expensive drug which certainly does not deserve an official place in the Pharmacopœia.—*Therap. Gaz.* 1912, v. 36, p. 764-766.

SUPPOSITORIA.

van Riel, Jr., and van der Wielen: The preparation of suppositories, bacilli and ovula, and the variation of the melting points of varying mixtures of oil of theobroma and wax, with a chart graphically illustrating the degree of variation.—*Pharm. Weekblad*, 1912, v. 49, p. 566-568.

SYRUPI.

[NOTE.—Following Government Printing Office style, which is governed by Webster's International Dictionary, the spelling "sirup" is used in this publication.]

Utech, P. Henry: For making sirup "Crystal A" confectioner's sugar is to be preferred; it seems to be entirely free from the bluish coloring principle. The water used must be distilled, not sterilized, if a perfect product is to be expected.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 474.

Saalbach, Louis: The purchased N. F. sirups are poor products. They can be made by the pharmacist at a much lower cost.—*N. A. R. D. Notes*, 1912, v. 14, p. 519.

Astruc and Duvochel: The alcoholic content of some of the official sirups.—*J. pharm. et chim.* 1912, v. 5, p. 245-247.

Dauphin, J.: The preparation of official Ph. Belg. III fruit juices and sirups, precautions to be observed.—*Ann. Pharm. Louvain*, 1912, v. 18, p. 335-337.

Richter, R.: The Ph. Germ. V now requires that sirups be kept in a cool place.—*Pharm. Zentrallh.* 1912, v. 53, p. 1149-1150.

Mann, E. W.: A table showing suggested standards, ranges of specific gravity, and other requirements for Ph. Brit. sirups.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 48.

Mauseau, A.: On the sirups of the Codex prepared by agitation.—*Bull. Soc. pharm. Bordeaux*, 1912, v. 52, p. 67-70.

Chauvin, A. C.: The determination of gum in sirups by the use of an alcoholic solution of neutral lead acetate and precipitating by means of acidified alcohol.—*Ann. falsif.* 1912, v. 5, p. 27-30.

SYRUPUS ACIDI CITRICI.

Diekman, George C.: Suggested formula and method of preparation for sirup of citric acid.—Proc. New York Pharm. Assoc. 1912, p. 115.

SYRUPUS ACIDI HYDRIODICI.

Horn, Wilbur F.: For making sirup of hydriodic acid, it would be better to direct the use of 510 grammes of sugar, and water a sufficient quantity to make 1,000 grammes.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 150.

Noyes, C. Reinold: Sirup of hydriodic acid should be made frequently fresh, not by the U. S. P. process, unless the druggist is prepared to do the assay, but by dilution.—Proc. South Dakota Pharm. Assoc. 1912, p. 46.

Egan, Thomas A.: The elements of hydriodic acid have such slight affinity for each other that the acid is quite readily decomposed.—J. Am. Pharm. Assoc. 1912, v. 1, p. 865.

Cook, Alfred N.: Two samples of sirup of hydriodic acid assaying 79 and 114 per cent of U. S. P. strength, respectively, were not passed.—Rep. F. & D. Com. South Dakota, 1912, p. 50.

Howard, Chas. D.: Of 3 samples of sirup of hydriodic acid examined, one was not conformable.—Rep. New Hampshire Bd. Health, 1912, p. 171.

Ladd, E. F.: Report on 53 samples of sirup of hydriodic acid, 15 of which were not within 10 per cent of the U. S. P. standard.—Bull. Agric. Exper. Sta. North Dakota, 1912, v. 2, p. 137-138.

SIRUP OF AMMONIUM HYPOPHOSPHITE.

Newton, R. Albro: The New England Branch recommends that the sirup of ammonium hypophosphite be unflavored or, if flavored, not with a synthetic like vanillin.—J. Am. Pharm. Assoc. 1912, v. 1, p. 277.

Hommell, P. E.: The addition of compound spirit of vanillin to sirup of ammonium hypophosphite is unnecessary, as it is apt to make it sickening to susceptible patients.—Proc. New Jersey Pharm. Assoc. 1912, p. 92.

Marshall, Ernest C.: A number of objections to the formula for the proposed sirup of ammonium hypophosphite are presented, together with a suggested formula.—N. A. R. D. Notes, 1912, v. 14, p. 621.

SYRUPUS ASARI COMPOSITUS N. F.

Anon.: Brief comment on the method of manufacture.—N. A. R. D. Notes, 1912, v. 14, p. 1793; see also p. 1798.

SYRUPUS AURANTII.

Patrouillard, Ch.: Note on the assay of sirup of bitter orange peel.—Bull. Sc. pharmacol. 1912, v. 19, p. 41; see also Maranne, Is., p. 42.

SYRUPUS CALCI LACTOPHOSPHATIS.

Horn, Wilbur F.: Suggests a modification in the mode of procedure for making sirup of calcium lactophosphate.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 150.

Saint-Sernin, A.: New formula for making sirup of calcium lactophosphate.—Bull. Soc. pharm. Bordeaux, 1912, v. 52, p. 99-101; see also Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 407-408.

McEwan, Donald: Sirup of calcium lactophosphate compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

SYRUPUS FERRI IODIDI.

Diekman, George C.: Suggested formula and method of preparation for sirup of iron iodide.—Proc. New York Pharm. Assoc. 1912, p. 117.

Noyes, C. Reinold: Sirup of ferrous iodide should be made frequently fresh.—Proc. South Dakota Pharm. Assoc. 1912, p. 46.

Ricardou, J. M.: Note on the decomposition of sirup of iron iodide, with suggested modifications of the formula.—Bull. Sc. pharmacol. 1912, v. 19, p. 677-679.

Smith, George G.: Goodale has reported a case of severe dermatitis, due in all probability to the ingestion of iron iodide.—Boston M. & S. J. 1912, v. 167, p. 327.

Tables showing some of the analytical results reported for sirup of ferrous iodide.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Caspari, Chas., jr.....	381	45	Rep. Food & Drug Com. Maryland, 1912, Baltimore, 1913, p. 15.
Cook, Alfred N.....	2	1	Rep. South Dakota F. & D. Com. 1912, p. 50.
De Barr, Edwin.....	9	4	Rep. Oklahoma P. H. Dept. 1912, p. 457.
Fitz-Randolph, R. B.....	5	3	Rep. New Jersey Bd. Health, 1911, 1912, p. 226.
Ladd, E. F.....	72	15	Bull. Agric. Exper. Sta. North Dakota, v. 2, p. 136-137.
Stallings, R. E.....	39	11	Bull. Georgia Dept. Agric. No. 56 [1912], p. 121-123.
Wulling, Frederick J.....	5	5	J. Am. Pharm. Assoc. 1912, v. 1, p. 1122.
Brown, Linwood A.....	36	4	Proc. Kentucky Pharm. Assoc. 1912, p. 51.

SYRUPUS HYPOPHOSPHITUM.

Sass, S. K.: When made adhering strictly to the formula and directions of the U. S. P. this preparation is a failure. It will not keep for any length of time. When finished it is not of the U. S. P. strength, as some of the hypophosphites are precipitated and left in the filter. Formula and method are suggested.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1252.

McEwan, Donald: Sirup of hypophosphites, compared with its use in 1888, is now scarcely, if ever, prescribed.—*Pharm. J.* 1912, v. 88, p. 331.

SYRUPUS HYPOPHOSPHITUM COMPOSITUS.

Horn, Wilbur F.: Suggestion that 400 cc. of water, instead of 450 cc. as directed, be used for dissolving the calcium, sodium, and potassium hypophosphites.—*Proc. Pennsylvania Pharm. Assoc.* 1912, p. 150.

Utech, P. Henry: The addition of a small quantity of hypophosphorous acid seems to remedy the trouble of securing a permanently clear product.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 474.

Sass, S. K.: The U. S. P. formula needs an increase in the amount of sugar and a rearrangement of the directions; if these corrections are made, a most satisfactory preparation will result.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1252.

SIRUP OF IODOTANNIN.

Roemer, John: The proposed formula for sirup of iodotannin is unsatisfactory. A lot made as directed contained iodine after being heated for several days.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 272.

Grimbert, L.: Modification of the formula for sirup of iodotannin.—*J. pharm. et chim.* 1912, v. 6, p. 153-159.

Devillers, L.: Another new formula for iodotannic sirup.—*Bull. Sc. pharmacol.* 1912, v. 19, p. 155.

Pecker, H.: The composition of sirup of iodotannin, with an improved formula for making the same.—*J. pharm. et chim.* 1912, v. 6, p. 69-73.

Courtot, C.: The nature of the active principles in solution of iodotannin, with illustrations of the crystalline formations obtained.—*J. pharm. et chim.* 1912, v. p. 253-258.

Goris, A.: On the condition of the iodide in sirup of iodotannin; a reply to the criticism by Courtot.—*J. pharm. et chim.* 1912, v. 6, p. 398-400.

Garnal, Paul: A new method of preparation of iodotannic sirup, simple or phosphated. A criticism of the Codex method.—*Répert. Pharm.* 1912, v. 24, p. 529.

Marchand, Ch.: It is recommended that sirup of bitter orange peel be added after the preparation of iodotannic sirup, according to the Ph. Fr. V.—Bull. Pharm. Sud-Est, 1912, v. 17, p. 153.

Goris and Wirth: Estimation of iodine in iodotannic sirup.—Bull. Sc. pharmacol. 1912, v. 19, p. 198–202; see also Goris, A., p. 202–209, and Ann. falsif. 1912, v. 5, p. 194–197.

Schamelhout, A.: The introduction into the supplement to the Ph. Belg. III of a fluid extract is to be regretted. Moreover, it is misnamed as it is not an extract, still less is it a fluid extract.—Bull. Soc. roy. Pharm. Bruxelles, 1912, v. 56, p. 267.

The Belgian Pharmacopœial Commission recommends that iodotannicus sirupus be included in the supplement to the Ph. Belg. Characters, and tests are outlined.—J. pharm. Anvers, 1912, v. 68, p. 656.

Raimondi, C.: The preparations of iodotannin used in medicine, with a bibliography.—Boll. chim. farm. 1912, v. 51, p. 217–220.

SYRUPUS PAPAVERIS N. F.

Roemer, John: The formula calls for poppy capsules without qualification, which admits of the use of any one of the numerous species.—Drug. Circ. 1912, v. 56, p. 248.

Beringer, Geo. M.: A proposed N. F. monograph for poppy capsules, which should yield not more than 10 per cent of ash, and the aqueous extract of the drug should give distinct precipitates with iodine T. S. and Mayer's reagent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 254.

Caldwell, Paul: If the capsules *per se* contain opium, a solution made of an equivalent amount of morphine with sugar dissolved therein, would lessen the work attached to the preparation.—Drug. Circ. 1912, v. 56, p. 70.

Hommell, P. E.: Sirup of poppy capsules is not needed in the N. F.; something more active is demanded.—Proc. New Jersey Pharm. Assoc. 1912, p. 92.

SYRUPUS PINI STROBI COMPOSITUS N. F.

Mansfield, William: Description of the white pine bark of commerce, with illustrations of microscopic elements.—J. Am. Pharm. Assoc. 1912, v. 1, p. 547–550.

Beringer, Geo. M.: A proposed N. F. monograph for white pine bark which, upon incineration, should yield not more than 2 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 258.

Army, H. V.: Resin content of white pine bark. The total precipitate from unrossed bark was 14.8 per cent and from rossed bark 6.2 per cent, the ether soluble precipitates being, respectively, 12.9 per cent and 4.3 per cent.—J. Am. Pharm. Assoc. 1912, v. 1, p. 551.

SYRUPUS RHEI ET POTASSI COMPOSITUS N. F.

Anon.: A formula which avoids the use of fluid extracts, but yields a product corresponding in contents to the N. F. preparation which will not precipitate.—N. A. R. D. Notes, 1912, v. 14, p. 365; see also p. 1794, 1798.

TALCUM.

Blair, Henry C.: Purified talcum is difficult to make and expensive to purchase. It is soluble to an uncertain extent, and for many other reasons is not always satisfactory.—Am. J. Pharm. 1912, v. 84, p. 302.

Bernegau, L. H.: One sample was examined which lost 6.1 per cent on ignition. The loss was due mainly to the presence of carbonates. Some of the many samples examined for fineness, carbonate, etc., contained an excessive amount of iron.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 179.

Newton, R. Albro: Quite a number of pharmacists say that kieselguhr, or infusorial earth, is very much better than talc or the other common powders as a filtering agent.—Apothecary, 1912, v. 24, March, p. 34.

La Wall, Charles H.: Method for the detection and estimation of talc in some forms of confections.—Am. J. Pharm. 1912, v. 84, p. 38.

TAMARINDUS.

Adlung: The tamarind tree is indigenous to tropical Africa and occurs in Kamerun, Togo, and German East Africa, but the drug is as yet not an article of export.—Apoth-Ztg. 1912, v. 27, p. 138.

TARAXACUM.

J. D. Riedel, A.-G.: The ash content of taraxacum was found to vary from 12.0 to 14.8 per cent.—Riedel's Berichte, 1912, p. 50.

Power and Browning: Abstract of a paper on the constituents of taraxacum root.—Pharm. J. 1912, v. 89, p. 694; see also Editorial Note, Lancet, 1912, v. 183, p. 1605.

Robson, Herbert J.: Remarkably beneficial results from the use of taraxacum in three cases of cancer.—Brit. M. J. 1912, v. 1, p. 1181.

Xrayser II: Taraxacum as a cure for cancer appears to be the very latest discovery and already there is quite a run on the liquid extract. It will be curious if even one case be found to yield to taraxacum.—Chem. & Drug. 1912, v. 80, p. 841.

Editorial: According to Haviland's account of some Irish remedies, in case of jaundice the dandelion is justly regarded as a valuable liver tonic; the virtue appears to lie in the color.—Pharm. J. 1912, v. 88, p. 684.

Needham, R. H.: *Taraxacum*, like *sarsaparilla*, will be hard to throw out, as it has a reputation established by generations of prescribers and users. All the same it should go.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1346.

TEREBINTHINA.

Thackara, A. M.: Exports of gum turpentine from Germany to the United States amounted to 80,993 metric tons in 1910, as compared with 83,619 tons in 1911.—*Cons. & Tr. Rep.* June 19, 1912, p. 1207.

Anon.: An improved method of chipping trees in turpentine orchards, with an illustration showing the scarified surface resulting from the old method of boxing trees.—*Sc. Am. Suppl.* 1912, v. 73, p. 29; see also *Am. J. Pharm.* 1912, v. 84, p. 317-327.

TERPINI HYDRAS.

Pougnnet, J. J. B.: *Fr. Pat.* 433,710, Aug. 29, 1911. Production of terpin hydrate by the action of ultraviolet rays.—*J. Soc. Chem. Ind.* 1912, v. 31, p. 257.

THEOBROMA.

Beringer, Geo. M.: A proposed N. F. monograph for cocoa—cacao. On incineration it should yield not less than 3.5 per cent nor more than 8 per cent of ash.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 71.

Gehe & Co.: The bulk of the trade in cacao is now centered in Hamburg, New York, London, and Havre; Lisbon no longer being an important factor.—*Handelsbericht*, 1912, p. 46-48.

Kühl, Hugo: Cacao is produced chiefly in America; Asia and Africa furnishing smaller quantities. Venezuela and Ecuador produce the most desirable quality.—*Südd. Apoth.-Ztg.* 1912, v. 52, p. 556.

Lock, R. H.: Cacao cultivation in Ceylon with a description of the origin and nature of the plant.—*Circ. & Agric. J. Roy. Bot. Gard.* 1912, v. 6, p. 87-100, 153-158.

Bainbridge and Davies: The essential oil of cacao.—*J. Chem. Soc. Lond.* 1913, v. 101, p. 2209-2221.

Kalusky, Louise: The determination of nibs in cacao.—*Ztschr. Unters. Nahr. u. Genusssm.* 1912, v. 23, p. 654-661.

Schmidt and Görbing: The determination of nibs in cacao according to the method proposed by A. Goske.—*Ztschr. öffentl. Chem.* 1912, v. 18, p. 201-214.

Richter, Otto: On the rapid determination of the fat content of cacao by means of the Zeiss refractometer.—*Ztschr. Unters. Nahr. u. Genusssm.* 1912, v. 24, p. 312-319.

THEOBROMINE SODIUM SALICYLATE.

The Belgian Pharmacopœial Commission recommends that theobrominum natrio-salicylicum, synonym, diuretin, be included in the supplement to the Ph. Belg. Characters and tests are outlined.—J. pharm. Anvers, 1912, v. 68, p. 669.

Derlin, L.: A sample of theobromine sodium salicylate was found to contain but 33 per cent of theobromine.—Apoth.-Ztg. 1912, v. 27, p. 805.

THYMOL.

Mindes, J.: Reports several characteristic reactions for thymol with fuming nitric acid.—Südd. Apoth.-Ztg. 1912, v. 52, p. 93.

Seidell, Atherton: Solubility and distribution coefficients of thymol.—Eighth Internat. Cong. Appl. Chem. 1912, v. 17, p. 85-91; also Am. Chem. J. 1912, v. 48, p. 453-467.

Schultz and Seidell: Subcutaneous absorption of thymol from oils.—Eighth Internat. Cong. Appl. Chem. 1912, v. 19, p. 271-280.

Schultz and Seidell: The determination of thymol in dog fæces.—Eighth Internat. Cong. Appl. Chem. 1912, v. 19, p. 281-286.

Usui, Ryuta: On the fixation of thymol in red blood cells.—Ztschr. physiol. Chem. 1912, v. 81, p. 175-184.

Musgrave, W. E.: Thymol is by far the most efficient of the known amœbacidal agents. (Bull. Bur. Gov. Lab. Manila, 1904).—J. Am. M. Assoc. 1912, v. 58, p. 16.

Allan, W.: Thymol is a satisfactory remedy for *Taenia saginata*, because it is cheap, requires no preliminary starvation or purgation, and is less expensive than pelletierine.—J. Am. M. Assoc. 1912, v. 59, p. 197.

Editorial: Burton Nichol reports satisfactory results from large doses of thymol in expelling hookworm. (J. Trop. med. & Hyg. January 1).—N. York M. J. 1912, v. 95, p. 238.

Bozzolo, Camillo: Notes on the treatment of ankylostoma anæmia (uncinariasis, hookworm disease) with thymol.—J. Am. M. Assoc. 1912, v. 58, p. 1744-1746. For correction in dosage, see v. 59, p. 1391.

Hand, A.: Thymol, the naphthol derivatives and phenyl salicylate, while theoretically powerful, are too irritating to the mucosa to be used in doses large enough to have any value as intestinal antiseptics in childhood (Arch. Ped. v. 29, No. 2).—J. Am. M. Assoc. 1912, v. 58, p. 894.

J. D. Riedel, A.-G.: König and Hoffmann use a 5 per cent alcoholic solution of thymol in place of tincture of iodine for the rapid disinfection of the skin for operative procedures.—Riedel's Berichte, 1912, p. 135.

For additional references see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

TINCTURÆ.

Richter, R.: Critical review of the Ph. Germ. V definition of a tincture.—Pharm. Zentralh. 1912, v. 53, p. 1241-1246.

Bohrisch, P.: The production of tinctures, more particularly the tincture of valerian, according to the Ph. Germ. V.—Pharm. Zentralh. 1912, v. 53, p. 615-625.

Böhner, K.: A discussion of the Ph. Germ. V requirement for coarse powders in the making of tinctures.—Apoth.-Ztg. 1912, v. 27, p. 517-518.

Anon.: Apothecaries should prepare their own coarse powders for making the official Ph. Germ. V tinctures.—Apoth.-Ztg. 1912, v. 27, p. 547.

Rothe, O.: The use of coarse powder in the making of Ph. Germ. V tinctures is deplored.—Apoth.-Ztg. 1912, v. 27, p. 477.

Heckerman, Adam B.: Discussion of the advantages of having the retail pharmacist with a small volume of business manufacture his own tinctures.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 143-144.

Blair, Henry C.: Unless the retail pharmacist uses large amounts of tinctures and becomes expert enough properly and accurately to assay them, it does not pay, either financially or morally, to make them.—J. Am. Pharm. Assoc. 1912, v. 1, p. 19.

Patch, E. L.: The range of extractive in tinctures prepared from drugs bearing the same name is very wide and might hint at improper percolation.—J. Am. Pharm. Assoc. 1912, v. 1, p. 370.

Noyes, C. Reinold: The practice of preparing tinctures by dilution of the fluid extract is one that should be discouraged.—Proc. South Dakota Pharm. Assoc. 1912, p. 44.

De Barr, Edwin: The making of tinctures from fluid extracts is a pernicious practice. A fluid extract can not be diluted in connection with the making of a tincture, and give a tincture of the proper appearance and color and consistency.—Am. Food J. 1912, v. 7, July, p. 30.

Caesar & Loretz: An outline of the method employed for determining the extract content of fluid extracts and the extract content of tinctures, respectively.—Jahres-Ber. 1912, p. 124.

Knapp, Th.: The dry residue and the specific gravity of a number of Ph. Helv. IV tinctures.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 676-678.

Anon.: A comparison of the specific gravity and extract values for tinctures observed by Kunze and by Ziegler.—Südd. Apoth.-Ztg.

1912, v. 52, p. 159-160; see also Kunze, *Apoth.-Ztg.* 1912, v. 27, p. 105-106, Hoger, p. 315, and Mie, p. 538-539.

Mann, E. W.: A table showing suggested standards, ranges of specific gravity and other requirements for Ph. Brit. tinctures.—*Ann. Rep. Southall Bros. & Barclay*, 1912, 1913, p. 49-51.

Hartmann, W.: A discussion on the "alcoholaturae," tinctures of fresh plant drugs, of the Ph. Fr. V.—*Pharm. Zentralh.* 1912, v. 53, p. 975-976.

Haycock, J.: Many concentrated tinctures on the market do not, when diluted, represent faithfully the B. P. tinctures, probably as the result of faulty extraction.—*Pharm. J. Lond.* 1912, v. 89, p. 141; see also *Year-Book of Pharmacy*, 1912, p. 535-539.

Carmichael, Thomas II.: With but few exceptions all of the 500 or more tinctures of the Homœopathic Pharmacopœia of the United States are made of a standard strength of 10 per cent.—*Am. Druggist*, 1912, v. 60, p. 231.

Xrayser II: Apropos of the finding in Birmingham of several tinctures 15 years old, brief comment is made on the possibilities of deterioration and the dangers of concentration.—*Chem. & Drug.* 1912, v. 81, p. 683.

Bodinus, Fr.: Report of some experimental work on the possible utilization of wine as a menstruum for potent medicaments.—*Pharm. Ztg.* 1912, v. 57, p. 786; see also Wiebelitz, p. 838.

Güth, Heinrich: The testing of alcohol containing beverages, tinctures, and perfumes for contaminations with methyl alcohol. A review.—*Pharm. Post*, 1912, v. 45, p. 687-688.

TINCTURA BRYONIÆ N. F.

Power, Frederick B.: Bryony root has been used medicinally from a very remote period on account of its purgative properties. The assumption of previous investigators that the active principle is a glucoside has been shown to be incorrect.—*Am. J. Pharm.* 1912, v. 84, p. 153-155.

Ellingwood, Finley: The therapeutic applications of bryonia.—*Am. J. Clin. Med.* 1912, v. 19, p. 387-390.

Renshaw, I. J. E.: Bryonia is a specific in cases of lumbago.—*Practitioner*, 1912, v. 88, p. 210.

Hobby, A. W.: Bryonia is indicated in acute tonsillitis when there is marked pain on swallowing, with the pain running toward the ear.—*Eclectic M. J.* 1912, v. 72, p. 134.

McClelland, J. H.: Peritonitis or pleuritic invasion is often cleared up by the use of bryonia.—*Hahnemann. Month.* 1912, v. 47, p. 587.

TINCTURE OF CACTUS GRANDIFLORUS.

Beringer, Geo. M.: A proposed N. F. monograph for the fresh, succulent stems of the wild growing *Cactus grandiflorus*.—J. Am. Pharm. Assoc. 1912, v. 1, p. 71.

Hommell, P. E.: There is not sufficient clinical evidence that tincture of cactus grandiflorus will produce more tangible results than other heart remedials.—Proc. New Jersey Pharm. Assoc. 1912, p. 91.

De Jonge, Cornelius: The process for tincture of cactus should be modified so as to apply to the drug preserved in alcohol, the usual form on the market.—J. Am. Pharm. Assoc. 1912, v. 1, p. 272.

Carmichael, T. H.: The value of cactus has been verified in so many instances that the assertion of the Council on Pharmacy and Chemistry that "present indications are too uncertain to afford a safe basis for recommending it," only shows the faulty methods of the investigation.—J. Am. Inst. Homœop. 1911-1912, v. 4, p. 502.

Felter, H. W.: Cactus is primarily a nerve remedy, acting secondarily upon the heart and to a lesser extent upon the blood vessels.—Ellingwood's Therap. 1912, v. 6, p. 187-189.

Anon.: Cactus is probably as much abused by homœopaths as is digitalis by allopaths.—J. Am. Inst. Homœop. 1911-1912, v. 4, p. 1212.

TINCTURE OF CARAMEL.

Beringer, George M.: Purified caramel and the standardizing of caramel, and a formula for a standard tincture to be made from this product.—Am. J. Pharm. 1912, v. 84, p. 160-166; see also J. Am. Pharm. Assoc. 1912, v. 1, p. 219-223.

Charles, P.: Caramel was found to be adulterated with ammonium carbonate and sodium carbonate. It sometimes contains 50 per cent sodium carbonate crystal.—J. Am. Pharm. Assoc. 1912, v. 1, p. 375.

Army, H. V.: Contribution on eudbear extracts and caramel.—Pract. Drug. 1912, v. 30, April, p. 24-26.

TINCTURE OF COCCULUS.

De Jonge, Cornelius: Percolation of tincture of fishberry is not practicable because of the close sedimentation of the ground drug; maceration is to be favored.—J. Am. Pharm. Assoc. 1912, v. 1, p. 272; see also Drug. Circ. 1912, v. 56, p. 157.

Caldwell, Paul: The popular use of this drug for the purpose suggested is not so great as to justify its incorporation in the National Formulary.—Drug. Circ. 1912, v. 56, p. 69.

Bayley, Weston D.: Cocculus is indicated in the treatment of a neurotic patient who mopes on one unpleasant subject, who is absent-minded and vacillating.—Hahnemann. Month. 1912, v. 47, p. 99.

TINCTURE OF DELPHINIUM.

Rippetoe and Minor: Two samples of larkspur seed examined contained 5.84 and 5.85 per cent of ash, respectively.—*Am. J. Pharm.* 1912, v. 84, p. 441.

Patch, Edgar L.: Larkspur seed yielded 6 per cent of ash (1.62 per cent alkaloids).—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 1121.

De Jonge, Cornelius: Percolation of tincture of larkspur is not practicable because of the close sedimentation of the ground drug; maceration is to be favored.—*Drug. Circ.* 1912, v. 56, p. 157; see also *J. Am. Pharm. Assoc.* 1912, v. 1, p. 272.

Caldwell, Paul: This is a welcome addition; but it should be made with weaker alcohol containing some acetic acid. In this form it could be offered all the more freely for the purpose for which it is intended.—*Drug. Circ.* 1912, v. 56, p. 70.

Hommell, P. E.: Tincture of larkspur is a valuable parasiticide, being frequently exhibited.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 91.

TINCTURA FERRI CITRO-CHLORIDI N. F.

Raubenheimer, Otto: To develop and hold the apple-green color of tincture of iron citro-chloride, it is recommended that a sufficient quantity of sodium bicarbonate be added.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 351-353.

TINCTURA IGNATIÆ N. F.

Beringer, Geo. M.: A proposed N. F. monograph for ignatia, which contains about 4 per cent of ash and, when assayed by the method outlined, should contain not less than 2.5 per cent of mixed alkaloids.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 167.

Dohme and Engelhardt: No material variation in the amount of alkaloids in ignatia bean could be noticed.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 102.

J. D. Riedel, A.-G.: The ash content of ignatia was found to vary from 2.0 to 3.6 per cent; amount of insoluble ash to 0.7 per cent.—*Riedel's Berichte*, 1912, p. 51.

Fyfe: Ignatia constitutes a very useful medicament in many atonic conditions, and when clearly indicated it has no superior as a nerve tonic and nerve stimulant.—*Eclectic M. J.* 1912, v. 72, p. 158-159.

TINCTURE OF PASSION FLOWER.

Hommell, P. E.: The tincture of passion flower so very popular with the Homœopathic and Eclectic practitioners, is worthy of a conspicuous place in the N. F.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 91.

TINCTURA PERSIONIS N. F.

Beringer, George M.: Cudbear as a pharmaceutical coloring; standardization and constituents, with tabulated results of observations.—*Proc. New Jersey Pharm. Assoc.* 1912, p. 56-71; see also *Am. J. Pharm.* 1912, v. 84, p. 352-369, and *J. Am. Pharm. Assoc.* 1912, v. 1, p. 820.

Craig, Hugh: Ten samples of cudbear examined yielded tinctures that ranged through six distinct shades. There was no direct relation between the color of the drug and the color of the resulting solution.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 223-225; see also p. 499, and *Pharm. Era*, 1912, v. 45, p. 195.

Arny, H. V.: Contribution on cudbear extracts and caramel.—*Pract. Drug.* 1912, v. 30, April, p. 24-26.

TRAGACANTHA.

Tunmann, O.: Tragacanth is exported chiefly from Smyrna and to a lesser extent from Constantinople. London is the chief European market.—*Apoth.-Ztg.* 1912, v. 27, p. 72.

Ravndal, G. Bie: The Turkish gum tragacanth for 1911 is estimated at over 500 tons.—*Cons. & Tr. Rep.* July 3, 1912, p. 38.

Gehe & Co.: The imports of tragacanth for 1911, into the London market, aggregated 17,877 bales against 14,026 bales for the previous year. The consumption of the better grades of this gum has markedly increased during recent years.—*Handelsbericht*, 1912, p. 107-108.

Richter, R.: The Ph. Germ. V now includes a microscopical test for tragacanth.—*Pharm. Zentralh.* 1912, v. 53, p. 1297.

Rusby, H. H.: Two fraudulent practices have been commonly indulged in, namely, the sale of India gum in place of or mixed with tragacanth, and the sale of a grade of tragacanth which does not meet the official standard.—*J. Am. Pharm. Assoc.* 1912, v. 1, p. 503.

Emery, W. O.: The volatile acidity of gum tragacanth compared with that of Indian gum, with an outline of the method of estimation, and a description, with illustration, of the apparatus for the distillation of volatile acids.—*Circ. Bur. Chem. Agric.* 1912, No. 94, p. 5; see also *J. Ind. & Eng. Chem.* 1912, v. 4, p. 374-377, and *Am. J. Pharm.* 1912, v. 84, p. 393-398.

Fuller, H. C.: The sophistication of tragacanth with Indian gum, and its detection by the determination of volatile acid in the distillate on boiling with mineral acid.—*Am. J. Pharm.* 1912, v. 84, p. 155-158.

Fromme, G.: Genuine tragacanth continues scarce, and the drug is frequently adulterated. The borax solution test proposed by Fuller is not considered reliable.—*Jahres-Ber.* 1912, p. 89-91.

Johnson & Johnson: Nine shipments accepted; one rejected, being very dark in color.—Lab. Notes, 1912, p. 37.

Caesar & Loretz: An outline of Payet's method of testing for gum Arabic.—Jahres-Ber. 1912, p. 168.

Mann, E. W.: The ash content of a considerable number of samples of entire and powdered tragacanth ranged from 1.88 to 2.67 per cent.—Ann. Rep. Southall Bros. & Barclay, 1912, 1913, p. 24.

Pearson, W. A.: Nine samples of Indian gum were compared and the mucilages made from them were found to vary considerably, both in color and consistency. This gum is no doubt used as an adulterant to tragacanth and has to some extent replaced tragacanth.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 173.

Pégurier, G.: Formula and method of preparation of glycerite of gum tragacanth.—Répert. Pharm. 1912, v. 24, p. 246; see also Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 570-571.

TRITICUM.

Rusby, H. H.: A single shipment of a grass rhizome somewhat resembling triticum, but totally distinct therefrom, has been offered and rejected under that name.—J. Am. Pharm. Assoc. 1912, v. 1, p. 504.

TUBERCULIN.

Richter, R.: Critical review of the Ph. Germ. V requirements for tuberculin. An enumeration of some of the commercial preparations of tuberculin.—Pharm. Zentralh. 1912, v. 53, p. 1302-1305.

Charpentier, P. G.: Brief outline of the history of tuberculin and its application in human and veterinary medicine.—Bull. Sc. pharmacol. 1912, v. 19, p. 156-164.

Lyons, W. C.: A new form of tuberculin (T. F.).—Lancet, 1912, v. 183, p. 1582.

Xrayser II: The varieties of tuberculin are legion. There are T. O. (original tuberculin, human); T. R. (new tuberculin, human); T. B. E. (tubercle bacillary emulsion, human); P. T. O. (persucht or bovine original tuberculin); P. T. R. and P. T. B. E., with other varieties less frequently mentioned.—Chem. & Drug. 1912, v. 80, p. 357.

Waller, H. Ewan: Brief illustrated description of a syringe for tuberculin.—Brit. M. J. 1912, v. 2, p. 721.

Squire, P. W.: Caution as to the method of prescribing tuberculin.—Lancet, 1912, v. 182, p. 57.

Forbes and Banks: Sterile abscesses following the use of tuberculin.—Lancet, 1912, v. 182, p. 1338.

Fitze, C.: The ocular tuberculin test and the intracutaneous tuberculin test as a means for determining tuberculosis in cattle.—*Arb. k. Gsundtsamte.* 1912–1913, v. 43, p. 505–519.

Morland, Egbert C.: The quantitative cutaneous tuberculin test.—*Lancet*, 1912, v. 183, p. 688–690.

Bell, Wm. M.: Advantages of the intracutaneous over the subcutaneous test.—*Am. Vet. Rev.* 1911–12, v. 40, p. 683.

Paris Correspondent: Mongour and Fouquet have come to the conclusion that the ophthalmic reaction to tuberculin of itself has no absolute diagnostic value.—*Lancet*, 1912, v. 183, p. 52; see *Compt. rend. Soc. Biol.* 1912, v. 72, p. 997.

Durel, Wallace J.: Brief statistical review of the clinical value of the tuberculins in the diagnosis and treatment of tuberculosis.—*J. Am. M. Assoc.* 1912, v. 59, p. 2181.

Laidlaw, George F.: Tuberculin in diagnosis and treatment.—*Hahnemann Month.* 1912, v. 47, p. 721–726.

Mackay, George, and others: Discussion on the use of tuberculin in diseases of the eye.—*Brit. M. J.* 1912, v. 2, p. 1026–1032.

Whiteside, George S.: The use of tuberculin in the treatment of surgical urogenital tuberculosis.—*J. Am. M. Assoc.* 1912, v. 59, p. 2332.

Riviere, Clive: The action of tuberculin and its application in the treatment of different forms of tuberculosis.—*Brit. M. J.* 1912, v. 1, p. 765.

Latham, Arthur: The uses of tuberculin in pulmonary tuberculosis.—*Lancet*, 1912, v. 182, p. 1109–1115.

Brown, Lawrason: Incipient cases treated with tuberculin do somewhat better than those not so treated, while the moderately advanced cases do much better.—*Am. J. M. Sc.* 1912, v. 144, p. 524–535.

Parsons, L. D.: The use of tuberculin in gradually increasing doses until large doses are tolerated without reaction is heartily recommended in the treatment of all cases of tuberculous disease. Tabulated summaries of 29 cases are given.—*Brit. M. J.* 1912, v. 2, p. 959–961.

Hallock, J. Henry: The tuberculin treatment of tuberculosis. Tuberculin was found to produce the best results in patients without fever and whose general condition was good. *Hahnemann. Month.* 1912, v. 47, p. 92–93.

Kuss: In France the tuberculin treatment of tuberculosis has been abandoned because of the accidents following its administration.—*Répert. Pharm.* 1912, v. 24, p. 74.

Editorial: Review of the discussion in the Royal Society of Medicine on the value of tuberculin in pulmonary tuberculosis.—*Lancet*, 1912, v. 182, p. 1073.

Book Review: Tuberculin is contraindicated in conditions of mixed ingestion in consumption.—Brit. M. J. 1912, v. 1, p. 193.

Kohler and Plant: Experiences with Rosenbach's tuberculin.—Therapist, 1912, v. 22, p. 31-33, 47-48, 55-57, 70-72, 83-84, 88-90, 106-108, 116-118, 123-126.

Solis-Cohen, Solomon: Editorial advocacy of the administration of tuberculin *per os*.—N. York M. J. 1912, v. 95, p. 132.

Miller, Lupton, and Brown: A study of the blood of patients with pulmonary tuberculosis undergoing sanatorium and tuberculin treatment.—Am. J. M. Sc. 1912, v. 143, p. 683-693.

Solis-Cohen and Strickler: Preliminary report of the effect of tuberculin treatment upon the leucocytic picture, with a review of literature and table of blood counts in half a dozen cases.—N. York M. J. 1912, v. 95, p. 53-56.

Calmette, Massol, and Mézie: Detection and estimation of tuberculous sensitizers, or antibodies, in the course of tuberculin therapy by various tuberculins.—Compt. rend. Soc. Biol. 1912, v. 73, p. 122.

Austrian, Charles R.: Tuberculin hypersensitiveness in man is a condition of true anaphylaxis and in cases of tuberculin idiosyncrasy at least sensibilisin may be present in the circulating blood.—J. Exper. M. 1912, v. 15, p. 149-162.

For additional references see Index Med.; Zentralbl. Exper. Med.; and J. Am. M. Assoc.

ULMUS.

North, Horace: Samples of ground elm bark devoid of mucilage are occasionally received.—Rep. Lehn & Fink's Analyt. Rep. 1910-1912, 1913, p. 32.

Jensen, H. R.: Three samples of powder from foreign sources were all of the same type, leaving 9.7 to 9.9 per cent ash; the color was decidedly paler than powder ground in the laboratory.—Evans' An. Notes, No. 7, 1912, p. 33.

Patch, Edgar L.: Elm bark yielded 12.4 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

Needham, R. H.: Ulmus is never sold as a mucilage, the whole bark can not be adulterated and the powdered is rarely.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1345.

Schirmer, Wolfgang: The properties and chemistry of the mucilage obtained from *Ulmus fulva* Michaux.—Arch. Pharm. 1912, v. 250, p. 248.

UNGUENTA.

Lucas, E. W.: Discussion of the ointments of the Ph. Brit. with suggestions for modifications in specific instances.—Chem. & Drug.

1912, v. 80, p. 262-264; see also p. 295, Emery, Chas. F., p. 309, and O'Donnell, Harry Scott, v. 81, p. 384, and Bagley, Alex., p. 492.

Mauseau, A.: On the ointments of the Codex.—Bull. Soc. Pharm. Bordeaux, 1912, v. 52, p. 537-540.

Zickner: Objections to the use of medicinal soft soaps as ointment bases.—Pharm. Ztg. 1912, v. 57, p. 503.

Schleimer, A.: The production of water containing ointment bases (German Patent 243,661).—Apoth.-Ztg. 1912, v. 27, p. 203.

Unna, Eugen: Ointment bases. A discussion of the substances used at the present time.—D.-A. Apoth.-Ztg. 1912, v. 33, p. 44-45, 59-60, 74-75; see also J. Am. Pharm. Assoc. 1912, v. 1, p. 673-680, and Drug. Circ. 1912, v. 56, p. 399-402.

Unna, Eugen: Paraffin ointment really is an ointment base which fulfills all demands for blandness and stability.—J. Am. Pharm. Assoc. 1912, v. 1, p. 674.

Linckersdorff: Concentrated ointments are considered an advantageous addition to the dispensing counter.—Pharm. Ztg. 1912, v. 57, p. 960.

Kühl, Hugo: A review of some of the literature on the antibacterial action of ointments.—Pharm. Zentrallh. 1912, v. 53, p. 273-276.

Gardiner, F.: A preliminary note on the penetrating power of some ointment excipients, with tabulated summary of some 13 experiments.—Brit. M. J. 1912, v. 1, p. 238.

Layman, Daniel W.: Describes and illustrates a compressed air ointment applicator and distributor, especially designed for the application of ointments to the nasal mucosa.—J. Am. M. Assoc. 1912, v. 59, p. 2313.

Sauerland, F.: The resorption of medicaments from salves by the employment of different bases.—Biochem. Ztschr. 1912, v. 40, p. 56-82.

UNGUENTUM.

McEwan, Donald: Unguentum simplex, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

UNGUENTUM ACIDI BORICI.

Lucas, E. W.: The demand for this ointment is enormous, and, with the exception of want of uniformity of the basis, it appears to meet with entire approval.—Chem. & Drug. 1912, v. 80, p. 263.

Rep. Local Govt. Bd. 1910-11: Of 34 samples of boric acid ointment examined, 1 was found to be adulterated or not up to standard.—Brit. & Col. Drug. 1912, v. 61, p. 62; also Pharm. J. 1912, v. 89, p. 810.

UNGUENTUM AQUÆ ROSÆ.

Blair, Henry C.: Cold cream is generally accepted as a synonym for unguentum aquæ rosæ. The result of the omission of this synonym from the Pharmacopœia has been that the market is flooded with all sorts of imitations, made of all sorts of oils from lard oil to coal oil, and even some cold creams claiming to have no oil at all in their composition.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 293-294.

Unna, Eugen: The compilers of the Pharmacopœia in constructing the formula for cold cream had to ignore the other properties and took into consideration only the softness.—J. Am. Pharm. Assoc. 1912, v. 1, p. 677.

Lucas, E. W.: The present formula is not satisfactory; the percentage of water is too high; moreover, spermaceti appears to fulfill no useful purpose and is better omitted. A modification is suggested.—Chem. & Drug. 1912, v. 80, p. 263.

UNGUENTUM DIACHYLON.

Anon.: Coroner's inquest on the death of a woman, aged 24, at Manchester, from taking diachylon plaster.—Pharm. J. 1912, v. 88, p. 140.

UNGUENTUM HYDRARGYRI.

Lucas, E. W.: It is hoped that the name may be altered to unguentum hydrargyri fortis, and unguentum hydrargyri dilutum be made official.—Chem. & Drug. 1912, v. 80, p. 264.

Scheringa, K.: The extinction of mercury in making mercurial ointment can be rapidly accomplished by the use of hydrated wool fat, slightly softened in a warm mortar.—Pharm. Weekblad, 1912, v. 49, p. 251.

Fleissig: On the estimation of mercury in ointments and in plasters of mercury.—Schweiz. Wehnschr. Chem. u. Pharm. 1912, v. 50, p. 584-585.

Brown, Linwood A.: Of 32 samples analyzed, 7 contained less than 90 per cent U. S. P. mercury strength.—Proc. Kentucky Pharm. Assoc. 1912, p. 50.

Howard, Charles D.: Of 12 samples of mercurial ointment purchased, 9 proved to be blue ointment, and even these failed to be of standard strength.—Bull. New Hampshire Bd. Health, 1912, v. 1, p. 23; see also Rep. New Hampshire Bd. Health, 1912, v. 22, p. 171.

Sayre, L. E.: Of 5 samples of mercurial ointment examined, 1 was found to be below standard.—Bull. Kansas Bd. Health, 1912, v. 8, Nos. 7-12, p. 150.

Freshwater, Douglas: The inunction treatment of syphilis as carried out at foreign spas.—Practitioner, 1912, v. 88, p. 439-446.

UNGUENTUM HYDRARGYRI NITRATIS.

Lucas, E. W.: The formula appears to give satisfaction when the pharmacopœial quantities are adhered to, but it has been pointed out that the temperatures may be reduced slightly with advantage.—Chem. & Drug. 1912, v. 80, p. 264.

UNGUENTUM SULPHURIS.

Diekman, George C.: Sulphur ointment as sometimes prepared is of doubtful value. The base should be selected according to the disease for which it is intended.—Proc. New York Pharm. Assoc. 1912, p. 119.

UNGUENTUM SULPHURIS COMPOSITUM N. F.

Anon.: In the preparation of this ointment it is important that both the precipitated calcium carbonate and sublimed sulphur be in impalpable powder.—N. A. R. D. Notes, 1912-1913, v. 15, p. 559; see also p. 564.

UNGUENTUM VERATRINÆ.

McEwan, Donald: Unguentum veratrinæ, as compared with its use in 1888, is now scarcely, if ever, prescribed.—Pharm. J. 1912, v. 88, p. 331.

UNGUENTUM ZINCI OXIDI.

Lucas, E. W.: Wild points out that this is used exclusively as a soothing and protective application, and suggests a paraffin basis.—Chem. & Drug. 1912, v. 80, p. 264.

Egan, Thomas A.: In making an ointment of zinc oxide, triturate the zinc oxide in a mortar with 10 per cent of oil of benne until a smooth paste results.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 295.

Diekman, George C.: In 8 samples of ointment of zinc oxide examined, the zinc oxide content varied from 16.45 to 22.00.—Proc. New York Pharm. Assoc. 1912, p. 130.

Brown, Linwood A.: Twenty-five samples examined; five deficient in zinc oxide, six contained petrolatum base, several very lumpy and poorly made.—Proc. Kentucky Pharm. Assoc. 1912, p. 52.

Howard, Charles D.: Of 18 samples of zinc ointment examined, 2 were found to be materially below the standard.—Bull. New Hampshire Bd. Health, 1912, v. 1, p. 23; also Rep. New Hampshire Bd. Health, 1912, p. 171.

URANIUM NITRATE.

Doolittle, R. E.: Uranium acetate, chemically pure, free from sodium, contained sodium and potassium salts.—Ann. Rep. U. S. Dept. Agric. 1912, Washington, 1913, p. 570.

According to the New York Branch of the A. Ph. A., there is a question why the nitrate of this substance should be preferred to the acetate.—Drug Topics, 1912, v. 27, p. 35.

Iwanow, W. N.: The possibility of explosion of uranium nitrate.—Chem. Ztg. 1912, v. 36, p. 297.

UVA URSI.

Rusby, H. H.: The addition of cut stems to this drug seems to have nearly ceased, a result apparently of the persistent rejection of the article when so treated.—J. Am. Pharm. Assoc. 1912, v. 1, p. 504.

Caesar & Loretz: The consumption of uva ursi appears to be increasing materially.—Jahres-Ber. 1912, p. 55.

J. D. Riedel, A.-G.: The ash content of uva ursi was found to vary from 2.1 to 3.3 per cent; amount of insoluble ash to 0.6 per cent.—Riedel's Berichte, 1912, p. 49.

Mannich, C.: Arbutin and its synthesis.—Pharm. Ztg. 1912, v. 57, p. 774; see also Arch. Pharm. 1912, v. 250, p. 547-560, and Pharm. Post, 1912, v. 45, p. 805.

Scoville, Wilbur L.: Samples of fluid extract of uva ursi at the end of 3 years were found to have precipitated badly and in some cases the precipitate had caked together.—J. Am. Pharm. Assoc. 1912, v. 1, p. 337.

VACCINE.

Elgin, W. F.: The production of vaccine, with a brief historical review of vaccination.—J. Am. Pharm. Assoc. 1912, v. 1, p. 680-688.

Blaxall, Frank R.: On the use of oil of cloves in the preparation of glycerinated calf lymph.—Rep. Local Govt. Bd. Lond. 1911-1912, p. 361-366.

Cliffe, W. L.: Vaccine virus should be kept in a refrigerator.—J. Am. Pharm. Assoc. v. 1, p. 688-689.

Book Review: An account of the Dresden State Vaccine Institute, by its director, Th. Chalybäus. Brief recapitulation of the historical part from the German point of view.—Brit. M. J. 1912, v. 1, p. 76.

Editorial: Review of smallpox vaccination in the United States. The wide prevalence of the disease indicates a general disuse of the practice of vaccination.—J. Am. M. Assoc. 1912, v. 58, p. 1602.

News Note: Vaccination statistics from the Philippines from 1898 to 1910.—Med. Rec. 1912, v. 81, p. 425.

London Correspondent: The increased exemptions from vaccination since 1899 are causing great concern to the public health authorities, because of the danger of an epidemic of smallpox.—J. Am. M. Assoc. 1912, v. 59, p. 889.

Rosenfeld, J.: Some observations on successful cowpox vaccination based on the experiments performed by von Pirquet.—J. Am. M. Assoc. 1912, v. 59, p. 16-18.

Editorial: Arm to arm vaccination.—Lancet, 1912, v. 182, p. 938.

Camus, L.: Active and passive vaccinal immunity.—Compt. rend. Soc. Biol. 1912, v. 73, p. 197.

Editorial: Public Health Bulletin No. 52 is characterized as a very valuable addition to medical literature, giving a good review of the laws and statutes referring to vaccination.—N. York M. J. 1912, v. 95, p. 1103.

Schamberg, Jay F.: The arguments of antivaccinists and the measure of truth and error contained therein.—J. Am. Pharm. Assoc. 1912, v. 1, p. 690-693.

Berlin Correspondent: Some misleading statements from anti-vaccinationists controverted by official investigation.—J. Am. M. Assoc. 1912, v. 59, p. 890.

Simpson, W. J.: Observations on the etiology of vaccinia and on the cultivation of the microbe of variola.—Lancet, 1912, v. 183, p. 20.

Teissier and Marie: An essay on the serotherapy of variola.—Compt. rend. Acad. Sc. Paris, 1912, v. 155, p. 1536.

Teissier and Gastinel: The reaction of fixation in vaccinia and variola.—Compt. rend. Soc. Biol. 1912, v. 73, p. 264; see also Compt. rend. Acad. Sc. Paris, 1912, v. 155, p. 1170.

Teissier, Duvoir, and Gastinel: Experimental nontegumentary vaccination in the rabbit by the subcutaneous, intravenous, peritoneal, and gastrointestinal routes.—J. physiol. et path. gén. 1912, v. 14, p. 1009-1018, 1027-1042.

Editorial: Much of the disagreeable part of vaccination is due to extraneous infection. It is to be hoped that the research along the lines pursued by Teissier, Duvoir, and Gastinel will be continued until some material advance over the crudeness of vaccination as now practiced is reached.—Med. Rec. 1912, v. 82, p. 1126.

Camus, L.: Passive vaccinal immunization and serotherapy.—Compt. rend. Acad. Sc. Paris, 1912, v. 155, p. 75.

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VALERIANA.

Mitlacher, Wilhelm: Observations on the cultivation of *Valeriana officinalis*.—Ztschr. allg. österr. Apoth.-Ver. 1912, v. 50, p. 459.

Henkel, Alice: Valerian will grow in light, well-prepared, and well-drained soil, and is propagated by dividing the roots in the fall and setting these portions in rows about two feet apart.—Drug. Circ. 1912, v. 56, p. 134.

Patch, Edgar L.: Valerian yielded 10 per cent of ash. Select valerian yielded 5.2 per cent of ash.—J. Am. Pharm. Assoc. 1912, v. 1, p. 1121.

Caesar & Loretz: The ash content of valerian was found to vary from 11 to 32.73 per cent.—Jahres-Ber. 1912, p. 104; see also p. 80.

J. D. Riedel, A.-G.: The ash content of German valerian was found to vary from 6.8 to 20.4 per cent.—Riedel's Berichte, 1912, p. 50.

Bohrisch, P.: The production of tincture of valerian according to the Ph. Germ. V, with a table giving the appearance and properties of a number of samples.—Pharm. Zentralh. 1912, v. 53, p. 615-625.

Chevalier, J.: A review of the chemistry, action, and mode of administration.—Nouv. remèdes, 1912, v. 29, p. 169-177.

Osborne, Oliver T.: The advantage derived from valerian is probably either from the alcohol contained in the several preparations, or else is psychic, from the disagreeableness of the odor.—J. Am. M. Assoc. 1912, v. 59, p. 1162.

VANILLA.

Swain, Robert Lee: *Vanilla planifolia* is so named because of the plain, flat leaves which are devoid of well-defined veins.—Drug. Circ. 1912, v. 56, p. 64.

Kühl, Hugo: Vanilla was introduced in the second half of the 16th century by Bernhardino de Sahagun under the name tlilxochitl. In Germany the article has been in use since the middle of the 17th century as a constituent of chocolate. (Südd. Apoth.-Ztg. 1911, 772.)—Pharm. Zentralh. 1912, v. 53, p. 66-67.

Dumont, F. T. F.: Brief description of the marketing of vanilla beans in Guadeloupe.—Am. Perf. 1912-13, v. 7, p. 238; see also Cons. & Tr. Rep. July 17, 1912, p. 293.

Lackey, R. H.: Mexican growers of vanilla are hurrying into the market improperly cured beans that are sadly lacking in quality.—Proc. Pennsylvania Pharm. Assoc. 1912, p. 61.

Weddell, Alexander W.: Preparing vanilla in the Seychelles; collecting, sorting, scalding, drying, washing, measuring, and packing.—Cons. & Tr. Rep. February 24, 1912, p. 812; also Am. Perf. 1912-13, v. 7, p. 18.

Gehe & Co.: The supply of vanilla from the Bourbon Islands for 1910-1911 aggregated 169,000 kilos, and it is expected that the crop for 1911-1912 will be even larger.—Handelsbericht, 1912, p. 68-70.

Roure-Bertrand Fils: The exports of Bourbon vanilla from Réunion are quoted as follows: 1909, 56,996 kilos; 1910, 44,486 kilos; 1911, 48,367 kilos.—*Sc. & Ind. Bull.* 1912, Series 3, No. 6, p. 105.

Caesar & Loretz: The Bourbon variety of vanilla is generally preferred.—*Jahres-Ber.* 1912, p. 59.

Adlung: Vanilla is being cultivated with some success in the German colonies.—*Apoth.-Ztg.* 1912, v. 27, p. 137.

Anon.: Workmen who are occupied daily in handling vanilla, cleaning the beans, brushing and packing them, are subject to certain symptoms known as vanillism.—*Am. Perf.* 1912-13, v. 7, p. 238.

The Canadian Government defines vanilla extract as the flavoring extract from vanilla bean, with or without sugar or glycerin.—*Am. Perf.* 1912-13, v. 7, p. 264.

Brooks, R. O.: Tabulated results of the examination of a large number of extracts of vanilla of different sources.—*Am. Perf.* 1912-13, v. 7, p. 264; see also 1911-12, v. 6, p. 202.

Wichmann, H. J.: A method for the detection of small quantities of coumarin, particularly in factitious vanilla extracts.—*Circ. Bur. Chem. U. S. Dept. Agric.* 1912, No. 95, p. 2.

Emery, J. Q.: The vanilla extract examined contained wood alcohol, tonka extract, vanillin, coumarin, prune juice, caramel, and coal-tar dyes.—*Rep. Wisconsin D. & F. Com.* 1912, p. 26.

Cook, Alfred N.: One sample of compound vanilla, tonka, vanillin, and coumarin contained a mere trace of vanilla and was misbranded as to the alcohol content.—*Rep. South Dakota F. & D. Com.* 1912, p. 46.

Miller, Clifford: Tabulated summary of the results of analysis of a number of extracts of vanilla.—*Proc. Maryland Pharm. Assoc.* 1912, p. 140.

Table showing some of the analytical results reported for tincture of vanilla.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	45	8	<i>Rep. Indiana Bd. Health</i> , 1911, 1912, p. 230.
Cady, H. P.	4	2	<i>Bull. Kansas Bd. Health</i> , 1912, v. 8, p. 62.
Caspari, Chas., jr.	69	19	<i>Rep. Food & Drug Com. Maryland</i> , 1911, Baltimore, 1913, p. 15.
Do.	44	10	<i>Rep. Food & Drug Com. Maryland</i> , 1912, Baltimore, 1913, p. 15.
De Barr, Edwin.	16	12	<i>Rep. Oklahoma P. H. Dept.</i> , 1912, p. 461.
Halverson, J. O.	7	5	<i>Ann. Rep. Missouri Food & Drug Com.</i> , 1912, p. 9.
Howard, Charles D.	16	10	<i>Bull. New Hampshire Bd. Health</i> , 1912, v. 1, p. 9-10.
Do.	35	24	<i>Rep. New Hampshire Bd. Health</i> , 1912, p. 170.
Klueter, Harry.	19	16	<i>Rep. Wisconsin Dairy & Food Com.</i> 1912, p. 60.
Potter, Hubert F.	3	1	<i>Rep. Connecticut Dairy & Food Com.</i> 1912, p. 12.
Ross, R. E.	16	4	<i>Bull. Florida Agric. Dept.</i> 1912, v. 22, p. 116-119.
Tilford, J. Floyd.	12	5	<i>Rep. Kansas Bd. Health</i> , 1912, p. 112.

VANILLINUM.

Hubbard, W. S.: Difficulties in the colorimetric estimation of vanillin.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 669-670.

Folin and Denis: A new colorimetric method for the determination of vanillin in flavoring extracts, by the use of the phosphotungstic-phosphomolybdic reagent.—*J. Ind. & Eng. Chem.* 1912, v. 4, p. 670-672; also *Am. Perf.* 1912-13, v. 7, p. 162.

Puxeddu, E.: Discussion of the effect of the action of light upon vanillin in benzene, toluene, and other solvents (*Atti Roi. Accad. Lincei*, 1911, v. 20, p. 717).—*Schimmel & Co., Semi-Ann. Rep.* 1912, Oct., p. 127; also *J. Soc. Chem. Ind.* 1912, v. 31, p. 255.

Anon.: The artificial chemical "vanillin" may be purchased of pure quality at 50¢ an ounce and is a most excellent substitute for vanilla.—*N. A. R. D. Notes*, 1912-1913, v. 15, p. 1599.

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HYGIENIC LABORATORY BULLETINS OF THE PUBLIC HEALTH AND MARINE-HOSPITAL SERVICE.

The Hygienic Laboratory was established in New York, at the Marine Hospital on Staten Island, August, 1887. It was transferred to Washington, with quarters in the Butler Building, June 11, 1891, and a new laboratory building, located in Washington, was authorized by act of Congress March 3, 1901.

The following *bulletins* [Bulls. Nos. 1-7, 1900 to 1902, Hyg. Lab., U. S. Mar.-Hosp. Serv., Wash.] have been issued:

*No. 1.—Preliminary note on the viability of the *Bacillus pestis*. By M. J. Rosenau.

No. 2.—Formalin disinfection of baggage without apparatus. By M. J. Rosenau.

*No. 3.—Sulphur dioxid as a germicidal agent. By H. D. Geddings.

*No. 4.—Viability of the *Bacillus pestis*. By M. J. Rosenau.

No. 5.—An investigation of a pathogenic microbe (*B. typhi murium* Danyz) applied to the destruction of rats. By M. J. Rosenau.

*No. 6.—Disinfection against mosquitoes with formaldehyde and sulphur dioxid. By M. J. Rosenau.

†No. 7.—Laboratory technique: Ring test for indol, by S. B. Grubbs and Edward Francis; Collodium sacs, by S. B. Grubbs and Edward Francis; Microphotography with simple apparatus, by H. B. Parker.

By act of Congress approved July 1, 1902, the name of the "United States Marine-Hospital Service" was changed to the "Public Health and Marine-Hospital Service of the United States," and three new divisions were added to the Hygienic Laboratory.

Since the change of name of the service the bulletins of the Hygienic Laboratory have been continued in the same numerical order, as follows:

*No. 8.—Laboratory course in pathology and bacteriology. By M. J. Rosenau. (Revised edition, March, 1904.)

†No. 9.—Presence of tetanus in commercial gelatin. By John F. Anderson.

*No. 10.—Report upon the prevalence and geographic distribution of hookworm disease (uncinariasis or anchylostomiasis) in the United States. By Ch. Wardell Stiles.

*No. 11.—An experimental investigation of *Trypanosoma lewisi*. By Edward Francis.

*No. 12.—The bacteriological impurities of vaccine virus; an experimental study. By M. J. Rosenau.

*No. 13.—A statistical study of the intestinal parasites of 500 white male patients at the United States Government Hospital for the Insane; by Philip E. Garrison, Brayton H. Ransom, and Earle C. Stevenson. A parasitic roundworm (*Agamomermis culicis* n. g., n. sp.) in American mosquitoes (*Culex sollicitans*); by Ch. Wardell Stiles. The type species of the cestode genus *Hymenolepis*; by Ch. Wardell Stiles.

*No. 14.—Spotted fever (tick fever) of the Rocky Mountains; a new disease. By John F. Anderson.

*No. 15.—Inefficiency of ferrous sulphate as an antiseptic and germicide. By Allan J. McLaughlin.

*No. 16.—The antiseptic and germicidal properties of glycerin. By M. J. Rosenau.

*No. 17.—Illustrated key to the trematode parasites of man. By Ch. Wardell Stiles.

*No. 18.—An account of the tapeworms of the genus *Hymenolepis* parasitic in man, including reports of several new cases of the dwarf tapeworm (*H. nana*) in the United States. By Brayton H. Ransom.

*No. 19.—A method for inoculating animals with precise amounts. By M. J. Rosenau.

*No. 20.—A zoological investigation into the cause, transmission, and source of Rocky Mountain "spotted fever." By Ch. Wardell Stiles.

*No. 21.—The immunity unit for standardizing diphtheria antitoxin (based on Ehrlich's normal serum). Official standard prepared under the act approved July 1, 1902. By M. J. Rosenau.

*No. 22.—Chloride of zinc as a deodorant, antiseptic, and germicide. By T. B. McClintic.

*No. 23.—Changes in the Pharmacopœia of the United States of America. Eighth Decennial Revision. By Reid Hunt and Murray Galt Motter.

No. 24.—The International Code of Zoological Nomenclature as applied to medicine. By Ch. Wardell Stiles.

*No. 25.—Illustrated key to the cestode parasites of man. By Ch. Wardell Stiles.

*No. 26.—On the stability of the oxidases and their conduct toward various reagents. The conduct of phenolphthalein in the animal organism. A test for saccharin, and a simple method of distinguishing between cumarin and vanillin. The toxicity of ozone and other oxidizing agents to lipase. The influence of chemical constitution on the lipolytic hydrolysis of ethereal salts. By J. H. Kastle.

*No. 27.—The limitations of formaldehyde gas as a disinfectant with special reference to car sanitation. By Thomas B. McClintic.

*No. 28.—A statistical study of the prevalence of intestinal worms in man. By Ch. Wardell Stiles and Philip E. Garrison.

*No. 29.—A study of the cause of sudden death following the injection of horse serum. By M. J. Rosenau and John F. Anderson.

†No. 30.—I. Maternal transmission of immunity to diphtheria toxine. II. Maternal transmission of immunity to diphtheria toxine and hypersusceptibility to horse serum in the same animal. By John F. Anderson.

†No. 31.—Variations in the peroxidase activity of the blood in health and disease. By Joseph H. Kastle and Harold L. Amoss.

†No. 32.—A stomach lesion in guinea pigs caused by diphtheria toxine and its bearing upon experimental gastric ulcer. By M. J. Rosenau and John F. Anderson.

*No. 33.—Studies in experimental alcoholism. By Reid Hunt.

†No. 34.—I. *Agamofilaria georgiana* n. sp., an apparently new roundworm parasite from the ankle of a negress. II. The zoological characters of the roundworm genus *Filaria* Mueller, 1787. III. Three new American cases of infection of man with horse-hair worms (species *Paragordius varius*), with summary of all cases reported to date. By Ch. Wardell Stiles.

†No. 35.—Report on the origin and prevalence of typhoid fever in the District of Columbia. By M. J. Rosenau, L. L. Lumsden, and Joseph H. Kastle. (Including articles contributed by Ch. Wardell Stiles, Joseph Goldberger, and A. M. Stimson.)

†No. 36.—Further studies upon hypersusceptibility and immunity. By M. J. Rosenau and John F. Anderson.

†No. 37.—Index-catalogue of medical and veterinary zoology. Subjects: Trematoda and trematode diseases. By Ch. Wardell Stiles and Albert Hassall.

No. 38.—The influence of antitoxin upon post-diphtheritic paralysis. By M. J. Rosenau and John F. Anderson.

†No. 39.—The antiseptic and germicidal properties of solutions of formaldehyde and their actions upon toxines. By John F. Anderson.

†No. 40.—1. The occurrence of a proliferating cestode larva (*Sparganium proliferum*) in man in Florida, by Ch. Wardell Stiles. 2. A reexamination of the type specimen of *Filaria restiformis* Leidy, 1880=*Agamomermis restiformis*, by Ch. Wardell Stiles. 3. Observations on two new parasitic trematode worms: *Homalogaster philippincensis* n. sp. *Agmamodistomum nanus* n. sp., by Ch. Wardell Stiles and Joseph Goldberger. 4. A reexamination of the original specimen of *Tania suginata abietina* (Weinland, 1858), by Ch. Wardell Stiles and Joseph Goldberger.

†No. 41.—Milk and its relation to the public health. By various authors.

†No. 42.—The thermal death points of pathogenic microorganisms in milk. By M. J. Rosenau.

†No. 43.—The standardization of tetanus antitoxin (an American unit established under authority of the act of July 1, 1902). By M. J. Rosenau and John F. Anderson.

No. 44. Report No. 2 on the origin and prevalence of typhoid fever in the District of Columbia, 1907. By M. J. Rosenau, L. L. Lumsden, and Joseph H. Kastle.

†No. 45.—Further studies upon anaphylaxis. By M. J. Rosenau and John F. Anderson.

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No. 80.—Physiological studies in anaphylaxis. Reaction of smooth muscle from various organs of different animals to proteins. (Including reaction of muscle from nonsensitized, sensitized, tolerant, and immunized guinea pigs.) By William H. Schultz.

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† No. 84.—Digest of comments on the Pharmacopœia of the United States of America (eighth decennial revision) and on the National Formulary (third edition) for the calendar year ending December 31, 1910. By Murray Galt Motter and Martin I. Wilbert.

No. 85.—Index-catalogue of medical and veterinary zoology. Subjects: Cestoda and cestodaria. By Ch. Wardell Stiles and Albert Hassall.

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No. 86.—Studies on typhus. By John F. Anderson and Joseph Goldberger.

No. 87.—Digest of comments on the Pharmacopœia of the United States of America (eighth decennial revision) and on the National Formulary (third edition) for the calendar year ending December 31, 1911. By Murray Galt Motter and Martin I. Wilbert.

No. 88.—Method for determining the toxicity of coal-tar disinfectants, together with a report on the relative toxicity of some commercial disinfectants. By Worth Hale.

No. 89.—Sewage pollution of interstate and international waters with special reference to the spread of typhoid fever. VI. The Missouri River from Sioux City to its mouth. By Allan J. McLaughlin.

No. 90.—Epidemiologic studies of acute anterior poliomyelitis. I. Poliomyelitis in Iowa, 1910. II. Poliomyelitis in Cincinnati, Ohio, 1911. III. Poliomyelitis in Buffalo, and Batavia, N. Y., 1912. By Wade H. Frost.

No. 91.—The cause of death from subdural injections of antimenigitis serum. By Worth Hale. II. Some noncholera selective media. By Joseph Goldberger.

No. 92.—Gaseous impurities in the air of railway tunnels. By Atherton Seidell and Philip W. Meserve.

No. 93.—Digest of comments on the Pharmacopœia of the United States (eighth decennial revision) and on the National Formulary (third edition) for the calendar year ending December 31, 1912. By Murray Galt Motter and Martin I. Wilbert.

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